







FAP

1

D376

NCF A

10

145.5
145

324.
20.
55573.
78.

Design

Keramic Studio

A MONTHLY MAGAZINE FOR THE
POTTER AND DECORATOR

o

Volume Six

MAY 1904 to APRIL 1905 INCLUSIVE

o

KERAMIC STUDIO PUBLISHING CO.
SYRACUSE, N. Y.

(All Rights Reserved)



KERAMIC STUDIO—Index

NATURALISTIC

MAY 1904

	PAGE		PAGE
Wheat and Tansy (blue prints).....Leta Horlocker.....	9	Indian Grass.....K. E. Cherry.....	151
Strawberries.....K. E. Cherry.....	11	Boneset.....Margaret Overbeck.....	154
Gloxinia.....Rockwood Moulton.....	13	Harebell.....Emma A. Ervin.....	156
Wild Roses.....H. Barclay Paist.....	21	Bouncing Bet.....Margaret Overbeck.....	156
		Thorn apples, tankard.....B. Van Court Schneider.....	159
		Little Grapes.....Sara Wood Safford (Supplem't).....	147

JUNE 1904

Chinese Lily.....Emma A. Ervin.....	28		
Narcissus.....J. F. Bernies & C. E. Williams.....	28-33	Holly and Mistletoe.....E. Aulich.....	169
Grasses and Flowers (blue prints).....Leta Horlocker.....	33	Plumbago.....K. E. Cherry.....	175
Wisteria.....Edna Gamble.....	34	Gourd Study.....Margaret Overbeck.....	179
Grapes, punch bowl.....Jeanne M. Stewart.....	36	Roses.....I. M. Ferris.....	183
Nasturtiums.....H. Barclay Paist (Supplement).....	27		

JULY 1904

Roses.....Sara Wood Safford.....	51	Chrysanthemum.....Sara Wood Safford.....	195
Wild Lilac.....K. E. Cherry.....	44	Hemlock.....Mary Thomas.....	198
Trumpet Flower.....K. E. Cherry.....	56	Hydrangea.....Russell Goodwin.....	198
Violets.....H. Barclay Paist.....	66	Hazlenuts.....H. Barclay Paist.....	200
Cherries.....Louise M. Smith.....	72	Morning Glories.....Austin Rosser & Yvetta Stork.....	200-204
		Lantanna.....K. E. Cherry.....	205
		Poppies.....T. McLennon Hinman (Sup).....	191

AUGUST 1904

Snow Berries.....Leta Horlocker.....	77		
Golden Rod.....Margaret & Hannah Overbeck.....	81-82	Persimmons.....Paul Putzki.....	215
Oleander.....Edith Alma Ross.....	84	Violets, plate.....I. M. Ferris.....	220
Dock and Red Clover (blue prints).....Leta Horlocker.....	85	Mushrooms.....H. Barclay Paist & Alice Willits.....	221-223
Jonquils.....J. F. Bernies.....	86	Mullen.....Russell Goodwin.....	224
		Study of Bird.....K. S. Sugano.....	228
		Flower Panels.....Sara Wood Safford.....	228
		Roses.....Rhoda Holmes Nicholls (Sup).....	235

SEPTEMBER 1904

Sunflower.....K. E. Cherry.....	102		
Trillium.....A. A. Robineau & Hannah Overbeck.....	109		
Mustard and Grass (blue prints).....Leta Horlocker.....	111	Swedish Gooseberries, tankard.....Jeanne M. Stewart.....	239
High Bush Cranberry.....C. L. Williams.....	112	Pine Cones.....Maud E. Hulbert.....	250
Honeysuckle.....Mary C. Thomas.....	114	Peaches.....Mary Burnett.....	253
Pansies.....E. Louise Jenkins (Supplement).....	135	Trailing Arbutus, bowl.....B. Van Court Schneider.....	253
		Freesia.....K. E. Cherry.....	253
		Thistles.....Mary Alley Neal (Supplement).....	258

OCTOBER 1904

Pussy Clover (blue print).....Leta Horlocker.....	124		
Primrose.....Carrie E. Williams.....	125		
Jimson Pod.....Mary Overbeck.....	133		
Blue Eyed Grass.....K. E. Cherry.....	137		
Dawn (Figure).....Harriet B. Strafer (Supplement).....	129-130		

NOVEMBER 1904

Grape Study.....Sara Wood Safford.....	146		
Water Ranunculus.....Beatrice Brooks.....	147		

DECEMBER 1904

JANUARY 1905

FEBRUARY 1905

MARCH 1905

APRIL 1905

CONVENTIONAL

MAY 1904

Tile.....Rookwood Moulton.....	7	Oleander applied to ceramic form.....E. Alma Ross.....	83
Dandelions.....H. Barclay Paist.....	8	Jack in the Pulpit, vase.....H. Barclay Paist.....	85
Celtic Plate.....Dante C. Babbitt.....	10	Plate and bowl, bee design.....Austin Rosser.....	88
Application of Gloxinia.....Rockwood Moulton.....	12	Child's Bread and Milk Set.....Austin Rosser.....	89
Plate Design.....Marie Crilley Wilson.....	17	Jack in the Pulpit, bowl.....Nellie Y. Hamilton.....	90
Cowslips.....Austin Rosser.....	18	Plate, fruit motive.....Russell Goodwin.....	91
Wash Bowl and Pitcher, flower.....Arthur Kidd.....	19	Cup and Saucer, Renaissance motive.....Cornelia W. Le Noir.....	92
Cup, Saucer and plate, rose.....Mariam Candler.....	20	Bowl, flower.....Beatrice Brooks.....	92
Peacock Study.....F. H. Rhead (Supplement).....	3	Plate, golden rod.....Alice B. Sharrard.....	92
		Plate, flower.....Marie Crilley Wilson (Supplement).....	126

JUNE 1904

Pitcher, Wisteria.....Russell Goodwin.....	35	Child's Set, buttercup.....Alice B. Sharrard.....	103
Tea Set, Oriental motif.....Florence E. Segsworth.....	38	Trillium.....A. A. Robineau.....	104
Tile.....Rookwood Moulton.....	39	Child's Set, clover.....Austin Rosser.....	108
Dolphin Design.....Mrs. Young.....	43	Tea Tile.....Mary E. Mason.....	115

JULY 1904

Color Sheet, various subjects.....Hugo Froelich (Supplement).....	49-50		
Bowl and Plate.....Emily F. Peacock.....	71		

AUGUST 1904

Tiles.....Alice Witte Sloan & Emily F. Peacock.....	75	Breakfast plate, tree design.....A. A. Robineau.....	126
Cup, saucer and plate, Jack in Pulpit.....Alice B. Sharrard.....	76	Game plate, goose.....Alice Witte Sloan.....	127
Jack in the Pulpit.....Hannah B. Overbeck.....	80-89	Syrup pitcher.....Chas. Babcock.....	128
Cup, saucer and plate, flower.....Margaret Overbeck.....	83	Larkspur cup and saucer.....Alice B. Sharrard.....	131
		Jardiniere, jimson pod.....Mary Overbeck.....	132
		Rockwood Moulton.....	135
		Plate, fruit motif.....Mabel C. Dibble.....	136
		Cherry border.....Lucia A. Soule.....	136
		Fish design.....H. Barclay Paist.....	138

SEPTEMBER 1904

OCTOBER 1904

KERAMIC STUDIO—Index

CONVENTIONAL—Continued

NOVEMBER 1904

Moccasin flower.....	H. Barclay Paist.....	145
Conventional plate.....	Catherine Sinclair.....	149
The Cicada, designs from the French.....	"Art et Decoration".....	152
Bowl, bird motif.....	Mazie E. Murphy.....	154
Bonbonniere, bird motif.....	Alice Witte Sloan.....	156
Peacock panel.....	Olive Sherman.....	157
Blue and White plate.....	Emily F. Peacock.....	153

DECEMBER 1904

Child's Bread and Milk sets.....	Margaret Overbeck and Lucia A. Soule.....	166,168
Dado for child's room.....	E. Alma Ross.....	169
Bo-Peep plate.....	Nina Lunn.....	171
Bowl and Pitcher, bird.....	Austin Rosser.....	172
Child's Bread and Milk set.....	Austin Rosser.....	173
Bowl and Plate, dragon fly.....	E. Laura Ripley.....	174
Child's set.....	Sabella Randolph and Marie Crilley Wilson.....	176-177
Fireplace and Hearth.....	E. Alma Ross.....	180
Child's set.....	Sabella Randolph.....	180
Tiles for Mantlepiece.....	E. Alma Ross.....	181
Child's Bread and Milk set.....	Chas. Babcock.....	182
Dado, gourd motive.....	Margaret Overbeck.....	184
Child's Set.....	Sabella Randolph.....	184
Bowl.....	E. Alma Ross.....	188
Scarlet Bean and Bird Panel.....	E. Alma Ross & Leta Horlocker (Supplement).....	169-170

JANUARY 1905

Bowl, Pitcher and Washstand top, locust.....	Mary Overbeck.....	191
----------------------------------------------	--------------------	-----

MAY 1904

Grand Feu Ceramics (10th paper).....	Taxile Doat.....	4
Conventionalization in Design.....	Hugo Froehlich.....	4

JUNE 1904

Grand Feu Ceramics (11th paper).....	Taxile Doat.....	30
Korean Ceramics.....	Randolph I. Geare.....	40

JULY 1904

Principles of Design (Color).....	Hugo Froelich.....	49
-----------------------------------	--------------------	----

AUGUST 1904

Grand Feu Ceramics (12th paper).....	Taxile Doat.....	53
Class in Design.....	Marshal Fry.....	57
Brush Work (1st paper).....	W. P. Jervis & F. H. Rhead.....	74
Grand Feu Ceramics (13th paper).....	Taxile Doat.....	100

SEPTEMBER 1904

Brush Work (2nd paper).....	W. P. Jervis & F. H. Rhead.....	97
Grand Feu Ceramics (14th paper).....	Taxile Doat.....	100
Fiji Pottery.....	Randolph I. Geare.....	110

OCTOBER 1904

Brush Work (3d paper).....	W. P. Jervis & F. H. Rhead.....	121
American Gres.....	Charles F. Binns.....	123
Modern Pottery of East India.....	Randolph I. Geare.....	134

MAY 1904

N. Y. Arts and Crafts Exhibition.....		22
The Making of a Casserole Cover.....	Ava M. Froehlich.....	25
Tray.....	Mrs. K. Wright.....	26

JUNE 1904

Hand Book Binding.....	Helen G. Haskell.....	45
Silver Spoon Dish.....	Emily F. Peacock.....	47
Candlestick.....	Mrs. W. T. Bush.....	47

JULY 1904

Furniture for Cottage and Camp.....	Elizabeth Saugstad.....	67
Making a Silver Tea Strainer.....	Emily F. Peacock.....	69

Henlock.....	Mary Thomas.....	197
Teapot Stand, rose motif.....	E. Alma Ross.....	200
Coffee set.....	Mr. and Mrs. Webb.....	201
Plate Borders.....	Clara Hastings.....	202
Salad Bowl, shooting star.....	E. Alma Ross.....	203
Tiles.....	E. Alma Ross.....	204

FEBRUARY 1905

Child's Bread and Milk set (figures).....	Austin Rosser.....	225
Flower Pot Stand.....	Margaret Overbeck.....	226
Tea Tile.....	E. Alma Ross.....	226
Cup and Saucer.....	Catherine Sinclair.....	226
Toast Cup.....	Florence Segsworth.....	227
Window Box tiles, peacock feathers.....	Margaret Overbeck.....	228
Border for fruit plate.....	A. A. Robineau.....	228
Child's Bread and Milk set, bird.....	Marie Crilley Wilson.....	229
Cup and Saucer, flower.....	Adeline Lienau.....	230
Monterey Cypress.....	Edna Gamble.....	230

MARCH 1905

Cups and Saucers from Cicada motif.....		240-250
-----------------------------------------	--	---------

APRIL 1905

Child's Bread and Milk set.....	Sabella Randolph.....	265
Brush and Mirror Backs.....	Jeannette Kimball.....	270,271
Fish drawings, from the French.....	"Art et Decoration".....	272, etc.
Tea Tiles.....	A. Witte Sloan and Margaret Overbeck.....	276
Berry Plate.....	Olive Sherman.....	277
Conventional Cup and Saucer.....	Chas. Babcock.....	278
Hydrangea Borders.....	Alice Witte Sloan.....	278

MISCELLANEOUS

NOVEMBER 1904

Brush Work (4th paper).....	W. P. Jervis & F. H. Rhead.....	143
Mat Glazes at Low Temperatures.....	Charles F. Binns.....	148

DECEMBER 1904

Brush Work (5th paper).....	W. P. Jervis & F. H. Rhead.....	167
-----------------------------	---------------------------------	-----

JANUARY 1905

Brush Work (6th paper).....	W. P. Jervis & F. H. Rhead.....	189
Ceramics at the St. Louis Exposition.....	(Rookwood Pottery).....	193
Some Quotations and Mottoes with Gifts.....		196
Paste for Raised gold (for beginners).....		197

FEBRUARY 1905

Brush Work (7th paper).....	W. P. Jervis & F. H. Rhead.....	214
Ceramics at St. Louis.....	(Grueby, Pewabic, Teco).....	216

MARCH 1905

Brush Work (8th paper).....	W. P. Jervis & F. H. Rhead.....	238
Ceramics at St. Louis.....	(Volkmar, McLaughlin, M. Fry).....	251

APRIL 1905

How to start a Conventional Design f(or Beginners).....		262
Banko Ware.....		264
Ceramics at St. Louis (Newcomb, Perkins, Mercer, Dedham, Merri- mac, Poillon, Alfred School).....		268-269

THE CRAFTS

AUGUST 1904

The Stencil.....	Clifton Windsor White.....	93
Silver Salt Cellar.....	Mrs. K. Wright.....	95
Wood Screens.....	M. E. Dow & Laura Roger Way.....	95

SEPTEMBER 1904

Some Work in Raffia.....	Madge E. Weinland.....	116
Wood Chests.....	Misses Robinson & Todd.....	117
Wall Cabinet.....	E. H. Budd.....	117
Tea Caddy.....	Emily F. Peacock.....	118

OCTOBER 1904

Raffia Waste Paper Basket & Pillow.....	Madge E. Weinland.....	139,140
Silver Belt and Spoon.....	Emily F. Peacock.....	141

KERAMIC STUDIO—Index

THE CRAFTS—Continued

NOVEMBER 1904		FEBRUARY 1905	
Making a Stained Glass Window (1st paper).....	Henry L. Parkhurst.	The Crafts at St. Louis.....	(Lalique, Gaillard, Rivaud)...
Stencil Designs.....	Clifton Windsor White.....		
	PAGE		PAGE
	160		231
	164		
DECEMBER 1904		MARCH 1905	
Making a Stained Glass Window (2d paper).....	Henry L. Parkhurst.	The Art of Enameling on Metal.....	(1st paper) Laurin H. Martin
Children Drinking Cups.....	Ellen Barker Day & Emily F. Peacock.....	Mirror Backs on Metal and Wood.....	Emily F. Peacock.....
	185		256
	187		257
JANUARY 1905		APRIL 1905	
Bead Work.....	G. Pomeroy	The Making of a Sun Dial.....	Joseph T. Higgins
Leather Work.....	Emily F. Peacock.....	The Art of Enameling on Metal (2d paper).....	Laurin H. Martin...
	206		280
	209		282

KEEP THE FIRE ALIVE

KERAMIC STUDIO

ANNIVERSARY NUMBER

CONTRIBUTORS

MRS. DANTE C. BABBITT ♀ ♀ ♀
MRS. K. E. CHERRY ♀ ♀ ♀
MISS M. L. CANDLER ♀ ♀ ♀
MR. TAXILE DOAT ♀ ♀ ♀
MR. HUGO FROEHLICH ♀ ♀ ♀
MRS. AVA M. FROEHLICH ♀ ♀ ♀
MISS LETA HORLOCKER ♀ ♀ ♀
MISS IDA A JOHNSON ♀ ♀ ♀
MR. ARTHUR KIDD ♀ ♀ ♀
MR. ROCKWOOD MOULTON ♀ ♀ ♀
MRS. HENRIETTA BARCLAY PAIST ♀
MISS AUSTIN ROSSER ♀ ♀ ♀
MR. F. H. RHEAD ♀ ♀ ♀
MRS. MARIE CRILLEY WILSON ♀ ♀
MRS. K. WRIGHT ♀ ♀ ♀

MAY MCMIV Price 35c. Yearly Subscription \$3.50

A MONTHLY MAGAZINE FOR THE POTTER AND DECORATOR

[The entire contents of this Magazine are covered by the general copyright, and the articles must not be reprinted without special permission.]

CONTENTS FOR MAY 1904

	PAGE
Editorial—Autumn Competition	I
National League of Mineral Painters	Ida A. Johnson I
The Spring Competition and some prize winners	2-3
Conventional Peacock Design (supplement)	F. H. Rhead 3
Grand Feu Ceramics; X	Taxile Doat 4 6
Tile—Second prize	Rockwood Moulton 7
Dandelions	Henrietta Barclay Paist 8
Photographic Silhouettes from Flowers	Leta Horlocker 9
Celtic Plate	Mrs. Dante C. Babbitt 10
Strawberries	K. E. Cherry 11
Gloxinia—First prize	Rockwood Moulton 12-13
Conventionalization in Design	Hugo Froehlich 14-16
Plate Design	Marie Crilley Wilson 17
Cowslips—Cup and Saucer	Austin Rosser 18
Wash Bowl and Pitcher	Arthur Kidd 19
Cup, Saucer and Plate	M. L. Candler 20
Wild Roses	Henrietta Barclay Paist 21
The Crafts—The Spring Exhibition Guild of Arts and and Crafts, New York	22-24
The Making of a Casserole Cover	Ava M. Froehlich 25
Tray	Mrs. K. Wright 26
Answers to Correspondents	26

Some Leading Agencies of Ceramic Studio

We take pleasure in mentioning a few of the leading agencies for the sale of the KERAMIC STUDIO, where, also, subscriptions may be placed:

Baltimore, Md.—W. H. Cullimore, corner Lexington and Park Sts.
Beaver Falls, Pa.—William T. Reeder, 1208 7th Ave.
Boston, Mass.—Miss E. E. Page, 286 Boylston St.; Smith & McCance, Old Corner Book Store.
Brooklyn—A. D. Mathews & Sons, Fulton Street.
Buffalo—Mrs. Filkins, 609 Main Street.
Chicago—A. C. McClurg & Co., Brentano's; Burley & Co.; A. H. Abbott & Co., 48 Madison Ave.
Cincinnati—Miss M. Owen, 245 Elm Street; A. B. Closson, 4th Street near Race; Traxel & Mass, 4th Street, near Elm.
Cleveland, Ohio—Vinson & Korner, 150 Euclid Ave.
Columbus, Ohio—Lee Roessler, 116 So. High Street.
Dayton, Ohio—W. W. Kile & Co.
Marietta, Ohio—J. E. Van Der Voort.
Denver, Colo.—E. Meininger, 807 16th Street.
Detroit, Mich.—L. B. King & Co.
Grand Rapids, Mich.—Miller, Wolfe Co.
Indianapolis, Ind.—Keramic Supply Co., Lemeke Building.
Kansas City, Mo.—Emery, Bird, Thayer Co., Geo. B. Peck Co.
Louisville—Louisville Book Store.

Milwaukee, Wis.—Des Forges Book Store, cor. Wisconsin St. & B'way.
Minneapolis, Minn.—Minn. Art China Co., 607 1st Ave. So.
New York City—Brentano's, Union Square; M. T. Wynne's, 11 E. 20th St.; The Fry Art Co., 36 W. 24th St.; Wanamaker's; American News Co. J. B. Ketcham, 107 W. 25th Street.
Newark, N. J.—Keramic Novelty Co.
Oakland, Cal.—Smith Bros.
Omaha, Neb.—Megeath Stationery Co.
Oxford, O.—A. Beaugureau's Emporium.
Philadelphia—Wanamaker's.
Pittsburgh, Pa.—Otto Schaffer & Bros.; Kurtz, Langbein & Schwartz; R. S. Davis & Co., 346 Fifth Ave.; John G. Yergan, 36 Fifth Street.
Reading, Pa.—Rowland's Book Store.
Rochester, N. Y.—Geo. W. Davis & Co.
San Francisco—Mrs. M. E. Perley, 207 Post Street.
Sioux City, Ia.—J. K. Prugh, 312 Nebraska Street.
St. Louis—F. Weber & Co.; A. S. Aloe & Co.
Syracuse—Wolcott Book Shop; Welch & Hollingsworth; W. Y. Foote; A. L. Varney & Co., 336 S. Salina Street.
Toronto—The Art Metropole.
Washington, D. C.—Woodward & Lothrop, Brentanos.
The Magazine may also be ordered from any news dealer or book store in this country, who can procure it through the American News Company, New York, or its branches.

KERAMIC STUDIO

Vol. VI, No. 1

SYRACUSE NEW YORK

May 1904



If the four problems for this Spring's Competition the first two seem to have been comparatively well understood, and the designs sent in were, on the whole, charming and showed a marked advance over former competitive work. The tile problem however, has not yet been grasped, and we shall make it a feature of our next competition, giving in the meantime some good examples by way of instruction. Mr. Hugo Froehlich kindly consented to act as final judge of the designs.



The flower subject for the August class room will be the Dandelion, drawings of which, by Mrs. Paist, are given in this number; as it is so common a flower, all can make their own studies from which to design. Work must be sent in by June 15.



NATIONAL LEAGUE OF MINERAL PAINTERS

ABOUT a year ago the chairman of Education, Miss Mary Chase Perry, prepared the plan for the work of this year, which was practically a continuation and development of what had gone before.

The work of the previous two years, as exemplified and illustrated in the travelling exhibitions, elicited a great deal of interest, and there was a well-founded hope that the fuller fruition of all these efforts would be shown in the collection to be sent to the St. Louis Exposition. These pieces reached New York last week, and when they were displayed the members of the Advisory Board were confronted with a most serious problem, for out of the small number sent, but nineteen were marked by the Judges. Nineteen pieces, no matter of however high an order of merit, did not seem to make a sufficiently dignified exhibit for as large an organization as the National League of Mineral Painters, and at a special meeting it was unanimously voted to give up the exhibition; the feeling being that the League could better stand the criticism of having no exhibition, rather than that of an inadequate representation.

When put face to face with such a situation, we felt it necessary to search for the explanation. Several letters have been received from the clubs, showing no diminution of interest, but quite the reverse, and giving as partial reasons for the small number of pieces sent, sickness of several members and in one case, the injury of some pieces in the last firing.

The impetus which the study of design has given to a higher standard, all over the country, has made many diffident about attempting work in a new and perhaps untried line. We feel that this really accounts for the non-representation of many, and we believe it the most important factor in the causes for the smallness of the exhibit.

While we feel that the clubs have not done their duty either to themselves or the League, yet we believe that there will be a readiness to attack the next year's work which may prove a partial recompense for the disappointment of this.

The members of the Board and committees have given many days of thought and labor for more than a year, and it

seems a matter of chagrin that so much effort should go for naught, but if the club conscience shall be stirred to greater activity we shall be content.

The tri-ennial election of officers will take place May 5, at 10 A. M., at the National Arts Club, 34th Street, New York, to which all members of the League are cordially invited.

Mrs. Bella B. Vesey, President of the Chicago Club, has been nominated for President of the League. The active conduct of the League has always been carried on in the East, and it seems only a proper tribute to Western enterprise, as we know it, to transfer the centre of activity to Chicago.

IDA A. JOHNSON,
President.

April 11, 1904.



THE AUTUMN COMPETITION

PROBLEM I—Dado in tiles for child's room, to be executed in two to five colors. This calls for a small drawing giving three repeats of border motif and whatever design is used below; a working color drawing of the tiles carrying the design; a careful study in black and white, line or wash drawing, of the motif used—both naturalistic and conventional—*i. e.*, a careful drawing of the natural aspect of the subject, with the separate parts available for design, accompanied by all the conventionalizations of the same which suggest themselves as motifs. First Prize, \$15.00. Second Prize, \$10.00.

PROBLEM II—Fireplace and Hearth for child's room, to be executed in two to five colors. This calls for either a border and repeat or a design which occupies the space allotted. A small drawing of the entire fireplace and hearth must be submitted, together with a working drawing in color of the tiles forming the design. The same to be accompanied by drawings of motif as in Problem I. First Prize, \$15.00. Second Prize, \$10.00.

PROBLEM III—Window box in tiles, to be executed in two to five colors. This calls for a working drawing in colors of tiles carrying design and a small drawing of window box complete. To be accompanied by drawings of motif as in problem I. First Prize, \$10.00. Second Prize, \$5.00.

PROBLEM IV—Tile design for teapot or flower pot stand, in two to five colors, accompanied by treatment over or under-glaze. First Prize, \$6.00. Second Prize, \$4.00.

PROBLEM V—Child's set of three pieces, Plate, Bowl and Pitcher or Mug; or washbowl, pitcher and rectangular tray. To be executed in two to five colors, and accompanied by drawings as in Problem I. First Prize, \$20.00. Second Prize, \$10.00.

The Jury reserves the right to withdraw any prize for which there is no sufficiently worthy design.

OPEN TO EVERYONE

No one is excluded—Non-subscribers, foreigners, former prize-winners, are eligible. Mark with fictitious name or sign, same to be on envelope enclosing name and address of competitor.

Competition closes October 15th, 1904. Designs must not be traceable to any existing pattern. All work should be mailed flat. Designs receiving mention will be considered for purchase.

KERAMIC STUDIO

Each design must be made separately and not overlapping another—strive for *simplicity* and appropriateness of design. Any number of designs can be submitted by one person. Designs from foreign countries should be sent by mail, *not* by express or Parcels Post. Registering insures perfect safety of mail delivery.



THE SPRING COMPETITION

PROBLEM I—Decorative study of flower with application to a Ceramic form.

1st Prize, \$25.00—Rockwood Moulton, Pratt Institute, Brooklyn, N. Y.

2nd Prize, \$15.00—E. Laura Ripley, Illinois College, Jacksonville, Illinois.

1st Mention—Minna Meinke, Rockville Centre, L. I.

2nd Mention—Hannah Overbeck, Cambridge City, Ind.

3rd Mention—Emma Ervin, Denver, Colo.

4th Mention—Edith Alma Ross, Davenport, Iowa.

5th Mention—Mary Overbeck, Cambridge City, Ind.

The number of good studies sent in under this section made it most difficult to decide the awarding of second prize

The decorative study by Miss H. Overbeck was very fine, better than either second prize or 1st mention; it was bold and simple but the balance of grey tones was not so good and the applied design was not up to the standard.

The decorative study by Miss Ervin was finer also than second prize or 1st mention, its chief characteristics were charms of grey tones and daintiness. Her applied design, however, was naturalistic instead of conventional.

The study by Miss Ross was good in grey tones and well drawn, the composition was not quite satisfactory. The applied design was simple and good, but she omitted to send a color drawing so that the real value of the design could not be judged.

The study by Miss Mary Overbeck was interesting but not so good in composition and the applied design was incomplete.

PROBLEM II—Child's set of three pieces.

1st Prize, \$15.00—Sabella Randolph, Alfred, N. Y.

2nd Prize, \$10.00—Austin Rosser, Butler, Missouri.

1st Prize \$10.00 (Children's choice)—Lucia Soule, Melrose, Mass.

1st Mention—Mary Overbeck, Cambridge City, Ind.

2nd Mention—Laura Ripley, Illinois College, Jacksonville, Illinois.



MISS LAURA RIPLEY—SECOND PRIZE DECORATIVE STUDY WITH APPLICATION TO A CERAMIC FORM

and the order of mentions. In many cases the decorative study would be especially fine and the application to a ceramic form poor, or vice versa, so the decision had to be made on an averaging of the various counts.

There was no question, however, as to the awarding of first prize; the study is bold and simple as well as finely composed and attractive in every way, the applied design is simple and good. The second prize hesitated between Miss Ripley and Miss Meinke, though a little in favor of Miss Ripley. The decision was finally made on the count that the subject of the decorative study was, perhaps, not so hackneyed and the form to which the design was applied was more original, also the design was possibly a trifle better adapted to the form and the drawing was more carefully executed. Miss Meinke's decorative study was not as interesting as many of the mentions but the applied design was good and the color was especially fine.

For this problem a large number of good designs were sent, but most used simple flower motifs which were just as appropriate for "grown ups" as for children. So these had to be put apart from the competition. The first and second prizes were awarded by Mr. Froehlich on their artistic merit alone. Then the question arose as to whether the child's own taste should not be consulted. So seven children ranging from 3½ to 12 years were selected as a jury. Every one of the little ones selected Miss Soule's design for first prize, four selected Miss Randolph's design for second, and three chose Miss Rosser's set. So it was decided to award a third prize, called the children's prize. The design in itself is very nice but the rabbit is too pictorial for a satisfactory conventionalization and the line below the rabbits is too thin to form a good support.

Miss Randolph's design for bread and milk set was particularly happy in color, a combination of medium light green

and grey blue on a creamy ground; and Miss Rosser's design for a toilet set to be executed in grey blue was well adapted and very appropriate.

The set submitted by Miss Overbeck was singularly well

amount of dignity which the eagle had but the lion had not. The design by Miss Ripley was good in color and the conventionalization of the dragon fly was also well done but the adaptation to the plate and the shape of the cup were not good.



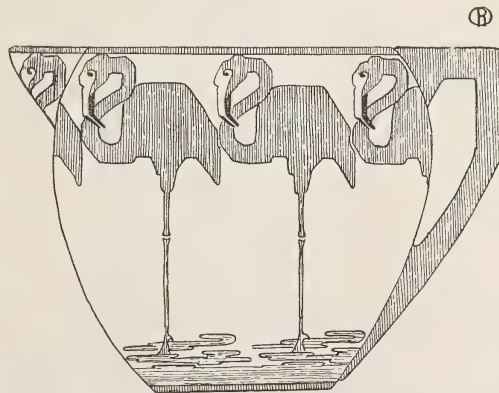
Sabella Randolph, First Prize



Lucia Soule, Children's Prize

conventionalized but verged just a little on the funny. The whole effect was Indian, the motif was the eagle and the lion, but the lion suggested rather a poodle dog, which would perhaps be amusing to a child, but a prize design calls for a certain

On the whole, the designs were very satisfactory and extremely promising. The prizes for tiles were withdrawn as there were no designs worthy, except 2nd prize single tile, which was awarded to Mr. Rockwood Moulton.



Austin Rosser, Second Prize

CONVENTIONAL PEACOCK DESIGN—(Supplement)

Frederick Hurten Rhead

THIS drawing requires as simple and direct treatment as possible. The different masses of color are rather drawn with the brush than painted. Commence with the point of the brush where the shape is thin or pointed, and as the shape widens out, exert more pressure on the brush, thus treating the design as a lesson in brush drawing, which will be of great assistance to the beginner who, as a rule, does not appreciate the full value of the brush.

First lay on a ground of light yellowish green. (I am assuming you require directions for painting on a china slab).

Then fire. Let the drawing be as simple as possible, leaving the details, as the feathers, stones in the foot-path, twists in the trunks of the trees, to be drawn with the brush. For the sky and other parts in yellow, use about 2 parts of White Enamel to one of Yellow and paint strong. The tail and wings are a dark green, it will be advisable to paint the wings first then the quill and outer circles of the feathers, then the masses between.

A rich dark blue is required for the neck of the bird and the inner circle of the feathers. Mix Yellow with the Dark Green, and a small proportion of French or 130 Brown to make the citron tone required for the leaves and stones. Use a good white enamel.

GRAND FEU CERAMICS

X—FIRING—Neuter, Oxidising, Reducing

Taxile Doat

THE fuel adopted for decorated porcelains is wood. Trials with coal have so far only given negative results, whatever the claim of some ceramists, who, in talking, have solved every problem, but whose exhibited works do not show any solution at all. What matters anyway the extra expense of using wood in an artistic production? The important point is to have a tractable fuel. Until the coming of a chemist who will obtain with coal the fresh and brilliant palette which wood gives, I will confine myself to the fuel of which I am about to speak.

The two principal species of trees are oak, the king of the forest, and the humble birch with its gay white bark. The kind of oak generally adopted for firing is the young oak, the bark of which is used by tanners. This tree falls by itself under the action of the sun, after longitudinal incisions have been made in it by foresters. But whether young or old, small or large, straight or knotty, oak can be used. Large trunks are cut into sticks of equal lengths. Large sticks are fed during the first part of the firing; those of medium and small size during the second part or *petit feu*. It is important to throw into the fire mouths charges of equal volume to obtain the necessary regularity in the increase of heat.

Oak has been adopted in Limousin, Vierzon, and at Sèvres and by all artists who decorate their works with *grand feu* colors, because on account of its close grain, it burns slowly and evenly. Its action is progressive, without rushes. Birch acts quite differently. Large trunks must be discarded, because of the slow work of their splitting. Birch four and five years old, in medium and small sizes, is the best. It must be sound, straight, without knots or rotten spots and perfectly dry. It should be cut two years before being used.

It is saved in two, its lengths being about 45 inches (this, 1m, 15, is the length generally adopted for the cutting of wood in the French forests). These sticks are then split into pieces of even size. For instance, a stick $3\frac{1}{2}$ to 4 inches in diameter will be split into six pieces; that of 2 to $2\frac{1}{2}$ inches into three; that of $1\frac{1}{2}$ to 2 inches into two only. A regular splitting allows one to feed evenly and to regulate the combustion. During the *grand feu* firing, birch is used exclusively. Its loose grain allows it to burn instantaneously when placed on the hopper of the fire mouth. It gives a long, clear, intense flame.

The basis of 45 inches being adopted for French cuts of wood, the wood will be cut with two or three sawings, according to the width of the fire mouth, as any false cut and consequent loss of wood must be avoided. The fire mouths of my kiln wood being $17\frac{1}{2}$ inches wide, oak is divided in four pieces by three sawings. It could be divided into only three pieces with two sawings, but its division in four allows me to fill the fire mouth better. Birch is divided into two, each piece being then from 22 to 23 inches long.

I have said elsewhere that after 3 or 4 firings, repairs sometimes of importance must be made to the kiln. The new masonry must be dried out. To obtain this result, a brazier is lighted for two days and two nights in the firing chamber. This brazier is made of placing rings superimposed, about an inch apart. When the kiln is entirely new this brazier must burn for about 10 days, as it is most important to have a kiln perfectly free from moisture. This drying is effected with coke.

Whatever care is given to the construction of a kiln and to the firing, it is impossible to have the same temperature in every part of the kiln. Naturally, the part which is close to the fire mouths is subject to a higher temperature than the

part where the flames leave the firing chamber. I have stated that there might be the enormous difference of 50°C . between the temperatures of the bottom and the vault of the kiln. It is extremely important to reduce this difference and to get as nearly an even temperature as possible by a progressive firing, without any rushes of heat. The firer should be constantly on the watch, especially during the *grand feu*.

The kiln is lighted by placing ten pieces of split birch in the bottom of the fire mouth, crosswise. On top are placed two round sticks of medium size oak. At the same time the stopper of the opening A at the base of the chimney (Fig. 50, page 228, Feb. 1904) is removed. A handful of chips or kindling wood is lighted there to displace the column of cold air which is in the chimney and to start the draft. The fire mouths are covered with a sheet iron plaque (Fig. 80) in the middle of

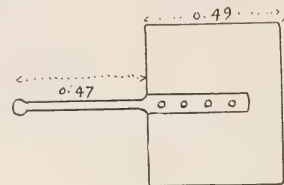


Fig. 80

which is a long iron stem for a handle. The draft is immediately established without any smoke getting into the room. If there is a baking chamber, the opening for starting the draft may be established in the door of this at the foot. Chips and kindling wood should be kept burning there until the draft is well started.

The time of firing a porcelain kiln is divided into three distinct divisions: the *drying*, the *petit feu* and the *grand feu*, or *slow*, *active* and *grand feu*.

The object of the drying is to remove all moisture which the kiln itself or the placing material may contain, either from dampness in the ground or in the atmosphere. I give the records (Fig. 89 and 90) of two of my wood firings so that it will be easier to follow every phrase and to understand better the action of the different parts of the kiln.

The *drying* lasts from 3 to 4 hours during which, every half hour, two large sticks of oak from 7 to 12 inches thick, or their equivalents, five round sticks about 2 inches thick, are placed crosswise and in good order, in the bottom of the fire mouth, as close as possible to the firing chamber. After three hours, one more large stick or its equivalent in small round sticks is added at the same intervals.

The drying being finished, one begins the active firing or *petit feu*, during which the heat must gradually penetrate the masses of placing material and the pieces they contain, all sudden rushes of heat which might cause cracks being carefully avoided. The *petit feu* is obtained by feeding one more big stick of oak or its equivalent in small round sticks every twenty minutes, without any special order. After seven to nine hours of this firing, the entire mass of the porcelain and the saggars has been penetrated and there is nothing more to fear with regard to breaks and cracks. The firing can now progress boldly until the fire mouth is full. By keeping it thus full, the kiln soon becomes red, as can be noticed by looking through the door spyhole. When the kiln has changed from dark red to cherry red, the *grand feu* has begun.

Before one becomes quite familiar with these two phases of the firing, and has learned by practice to obtain the cherry red in the time mentioned, it will be important to start the

grand feu only after the cherry red has completely pervaded the kiln. I reach my results in a definite time with a mathematical precision, which beginners cannot expect to secure, but with observation and care in feeding, they will soon be successful.

The drying and *petit feu* together generally take less time than the *grand feu*.

For the *grand feu* oak is discarded and birch used. The latter is not thrown into the fire mouth, but carefully placed on top of the latter, on the hopper (Fig. 82, 83 and 83 bis.).

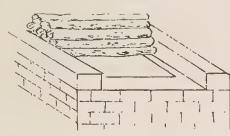


Fig. 82

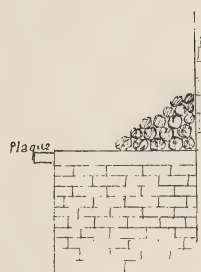


Fig. 83

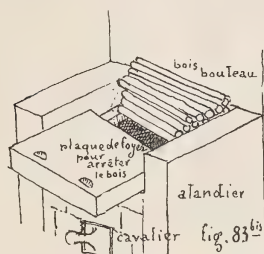


Fig. 83 bis

Every five minutes regularly a handful of about 10 birch sticks is placed against the side of the kiln, and all openings caused by the combustion must be promptly filled. From that time to the end of the firing, the fire mouths must not be lost sight of, as they must be constantly fed. The sheet iron plaque over the fire mouth is replaced by a fire brick plaque which rests on the hopper and supports the necessary amount of wood.

Once in a while, every two hours, and toward the end, every hour, one watches through the spyholes what is happening in the kiln. One sees through the white glass the fusible cones which successively curve and melt when the temperature of the kiln reaches their point of fusion. Behind the cones are three trial pieces which are rapidly picked up with an iron rod slightly curved at the end (Fig. 84 and 85). This rod is

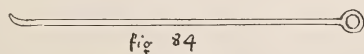


Fig. 84

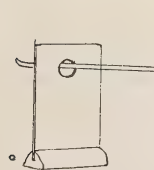


Fig. 85



Fig. 86

introduced through the opening of the spyhole, after the stopper of the latter has been removed with the help of wet cloth. The trial pieces show the true condition of the kaolinic matter. When with the help of these two tests and his experience, the firer judges the porcelain fired, he stops feeding fuel, slides two large fire brick plaques over the fire mouths to close them,

hermetically closes all openings and cracks with mortar, and stops the air drafts if any should have been established. The firing is over.

Since the invention of hard porcelain, firers invariably used in order to determine the condition of the porcelain, pieces placed in the middle of the kiln and called test or trial pieces. They are made of little tiles of baked porcelain about 2 inches long and 1 inch wide, with a large hole in the upper part. This upper part alone is glazed. To allow them to stand up, these test pieces have their feet wrapped in a wad of lute which gives them a large and solid basis (Fig. 86). Sèvres and the porcelain industry keep using these pieces which alone show the true condition of the ware. I do the same.

In 1882 the German chemist Seger conceived the clever idea of adding to these trial pieces fusible cones which can be seen during the development of the firing and relieve the operator from the uncertainties and anguish which formerly assailed him during the finishing hours. Simultaneously discovered at the factories of Berlin and Sèvres by chemists who were not aware of their similar work, these cones are made of fritted material of different fusibility. They have the shape of a triangular pyramid (Fig. 87). I will not undertake to

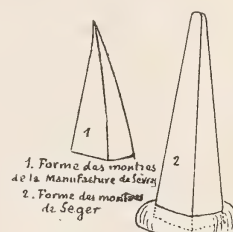
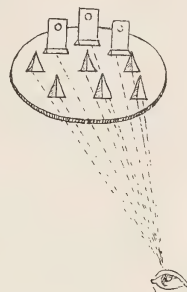


Fig. 87

describe their scientific composition; it will be sufficient to say that their successive melting indicates clearly if the same temperature is reached at the same time in all parts of the kiln where these cones are placed. Ceramists have so much appreciated the services rendered by these cones that their use has become quite general.

I order the cones direct from the makers, Seger & Cramer, Berlin, at the cost of fr. 5, 65 (about \$1.10) per hundred.*

The standard adopted for the numbering of the cones is the melting point of cast iron 1130°C. This is called cone No. 1. Numbers go from 1 to 32, which is the melting point of platinum 1770°C. Numbers which register temperatures lower than cone 1 are preceded by a cipher. They go as far down as the dark red registered by cone 022, or 590°C., the melting point of bright liquid gold. There is only about 20° difference between the successive cones. After many trials I have adopted the following cones for my firing:

For reducing fire	For oxidising fire
Cones 06	Cones 013
1	1
7	7
8	8 (fusion of feldspar)
9	9
10	10 (Sèvres hard porcelain.)

In reducing fire, cone 06, corresponding to the point of fusion of the glaze, marks the limit of reduction in the kiln. No. 10 indicates the temperature at which porcelain is fired and the firing should stop.

*In the United States, Prof. Edward Orton, Jr., Ohio State University Columbus, O., manufactures cones and sells them for one cent apiece.

In an oxidising fire, cone 013 marks the point at which the glaze is getting into a condition to be affected by carburets, when all reduction must cease and the firing remain strictly oxidising to the end. Other cones show the progress of the firing. These cones, blunt and long in Germany, large and pointed at Sèvres (Fig. 87), being silicates of alumina, resemble in their chemical composition the kaolinic products which the kiln contains.

Whatever the advantages of these fusible tests, which one

can see but not touch, they cannot be depended upon entirely to determine the exact moment when the firing should be stopped. It is necessary to use for this the trial pieces which can be examined after their extraction from the kiln. These pieces alone show the exact condition of the porcelain, its color, its translucency, the quality of the glaze and allow one to judge whether the firing should be stopped or continued for perhaps a quarter of an hour, half an hour, sometimes an hour.

TO BE CONTINUED.



TILE—SECOND PRIZE—ROCKWOOD MOULTON

ANCIENT MOHAWK POTTERY

R. Horracks of Fonda, N. Y., while stalking deer during the last hunting season at the Little Falls of the upper waters of the Sacondago, near lake Piseco, caught in a heavy downpour of rain, was obliged to seek shelter from the storm under the ledges of the Little Falls.

While sitting there his attention was attracted to what seemed to be a round, brown boulder partly covered with moss. Carelessly striking it it gave forth a hollow sound. His curiosity being excited he dug away the earth with his hunting knife and soon laid bare a symmetrically formed earthen jar.

The jar stands 10 inches high. At its largest circum-

ference it measures 30 inches and at its smallest 20 inches. The circumference of the top or mouth of the jar measures 24 inches.

The vessel on the inside bears signs of use, but the outside shows no trace of fire, as is usual in Indian jars. The bottom is rounded.

The ornamentation around the top is of the usual style of the Mohawk pottery—that is, a series of straight and diagonal lines.

The jar is a well-preserved specimen of Mohawk pottery, and is rare on account of the shape of the top, which is cut in three curves, forming three points, which gives it a triangular appearance.—*Boston Morning Globe*.



DANDELIONS—CONVENTIONAL STUDY—HENRIETTA BARCLAY PAIST



TREATMENT OF DANDELIONS

Henrietta Barclay Paist

LAY in with flat washes. For the leaves and buds a crisp green—Moss Green J and Brown Green (or Dark Green) mixed. For the flowers, a strong wash of Albert Yellow. The stems White or Pale Green. The whole outlined against a background of Black and Yellow Brown.

PORCELAIN OF SEVRES

IT is exactly 150 years since the porcelain manufactory at Sèvres, which has now practically become a school of industrial art, was established.

The principal building at Sevres contains the collection of the ceramic museum, which occupies the entire first floor, the ground floor being taken up with the newly manufactured products permanently exposed, the salesrooms, the library and the offices of the administration, on the second story the collection of models classified by epochs, which offers valuable material for the history of art during the last two centuries.

The studios are grouped behind the central building, with which a glass gallery places them in connection.

First comes the furnace hall, connected directly with the large studio for the fashioning of pieces of sculpture, the enameling studios, the studios of sculpture and decoration, the experimental studios, the technical museum, the hall of demonstration, and the different rooms for the students of the institution; finally, the casting rooms, those for mounting the different pieces, and the reserve room, in which one finds a collection of paintings and studies of the highest order, the dominating work being that of Francois Desportes.

Isolated from the other buildings is the building devoted to artists, in which the work of decoration by the employment of enamel glazings, the work of gilding, of chiseling, and of mounting is performed.—*Boston Journal*.



WHEAT



TANSY

PHOTOGRAPHIC SILHOUETTES FROM FLOWERS—LETA HORLOCKER



CELTIC PLATE—MRS. DANTE C. BABBITT

DIVIDE the plate in twenty parts. Trace on design and outline in black (equal parts Ivory Black and Dark Blue). The outer band is Dark Blue, Brunswick Black (Dresden) and a touch of Deep Purple. The inner lines are the same but much lighter, also the ground of design. Float the color on as evenly as possible and fire hard.

For second painting add $\frac{1}{8}$ Aufsetzweis to the mixture of blue using turpentine only. Fill in the design with green, using Apple Green, Mixing Yellow, a little Brown Green No. 6

and $\frac{1}{8}$ Aufsetzweis. These are the colors used in the Celtic ornaments. Another treatment for this design would be to outline in warm Grey, tint ground a rich pink using Deep Red Brown. Make outer band of gold and green bronze, $\frac{2}{3}$ bronze, $\frac{1}{3}$ gold. Fire and tint in Olive Green (Dresden). Clean out the design, retouch gold bronze and fire again. The green tint over the pink gives a very pretty soft color, and in combination with the pink design and bronze edge is very pleasing.



STRAWBERRIES · K. E. CHERRY

(Treatment page 12)



GLOXINIA

Rockwood Moulton

This flower is deep red, crimson and deep purple, sometimes shading into white at the ends of the petals.

TREATMENT OF STRAWBERRIES (Page 11)

K. E. Cherry

FIRST fire—for berries, use Yellow Red, Carnation and Blood Red; for greenish berries use Albert Yellow, Moss Green and Carnation. Leaves, use Moss Green, Apple Green, Brown Green and Black. Blossoms, use Copenhagen and Yellow, for shading, Yellow and Yellow Brown for centers.

Second fire—for berries, wash Yellow over lights and Carnation and Blood Red over shadows. Second fire, leaves: wash Yellow, Moss Green; accent veins with Violet and Brown Green. Background Yellow, Yellow Brown, Violet, Copenhagen Blue.

DISHES UNBREAKABLE

DINNER plates which your servants can idly drop upon the stone floor without breaking and dishes which make excellent hammers with which to drive nails are the discovery of United States Consul James C. McNally, at Liege, Belgium. Here is the story in his own words:—

"The Company Du Val-St. Lambert, of Liege, is manufacturing a hardened crystal dish, which in appearance closely resembles fine translucent china of uniform shape and manufacture. The resisting power of this ware is due to a special hardening process and to the quality and nature of the crystal used. It not only successfully resists the usual wear and tear but is almost proof against breakage.

"A hardened crystal dish can be substituted for a hammer in driving nails into wood, while the same ware can be put into boiling water at a high degree, then plunged into ice water repeatedly, without the least noticeable damage to the dish or plate.

"The writer has seen plates of the usual form, of this hardened ware, hurled to the stone floor of a warehouse and go bounding along the whole length of the building without suffering the least damage. This same firm makes glassware of the same corresponding resistance."—*N. Y. Herald.*



APPLICATION OF GLOXINIA TO A KERAMIC FORM, FIRST PRIZE—ROCKWOOD MOULTON

DECORATIVE STUDY OF GLOXIANA
FIRST PRIZE
ROCKWOOD MOULTON



CONVENTIONALIZATION IN DESIGN

Hugo Froehlich

TO conventionalize a plant form is to adapt the characteristic lines of the plant to the space which it is to occupy. These lines must be consistent with the structural lines of the object which they decorate. The difficulty, according to this definition, lies in *adapting* the characteristic lines and in making them *consistent* with the structural conditions of the object.

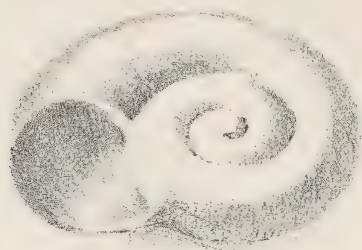


Plate I

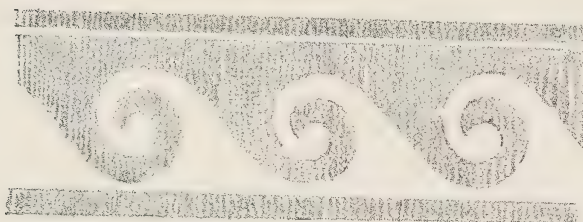


Plate II



Plate III

All forms included in the term "nature forms" possess in their contour a quality known as beauty of line.

The long sweep of the iris stem and leaf, and the delicate edges of its flowers make a combination of characteristic lines which appeals to our sense of the beautiful. It must be admitted that there are other elements of beauty in the iris plant, such as its color and modeling; however, its line element forms the chief source of delight and suggestion to the designer. This characteristic line quality is found in other aspects of nature such as landscapes, figure and animal forms; hence the necessity for going to nature.

It is the designer's art training, however, that enables him to see beauty and gather a wealth of material where others glean but little. As far back as we know, that has been true of all designers. Egyptian art which is the earliest record we have, bears out this statement.

The religious significance given by the Egyptians to the lotus, scarab, hawk, bull and other forms, coupled with their picture language, has resulted in a style full of variety and rich-

ness of art expression. They have, as it were, been father to design and directly or indirectly have influenced all historic styles. From Egyptian art have been evolved the laws of design which governed the art of subsequent nations, known as historic styles. It is for this reason and that of their inherent beauty, that we consult the art records of the past. We go to the past for the grammar of art but we go to nature for inspiration. The past teaches us how to use the lines, masses, and color found in nature.

Let us verify this. In Plate I we see the shell form. Its adaptation in the Greek border Plate II shows the process of the designer's mind in translating the natural form into a motive.* The spiral of the shell suggested design possibilities, because every spiral has by its related line movement a charm that attracts the eye. The arrangement, however, of the spiral in a border required a complete knowledge of the principles of design.

It is this problem of arrangement according to the laws of composition, that presents the greatest difficulty.

The same spiral may be used in a border as in Plate III and not produce beauty or art, because the arrangement violates the laws of design. There must be plan and order.



Plate IV

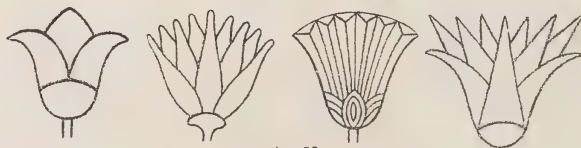


Plate V

Plate IV represents the natural lotus flower, in its detail, perspective, and accident of growth. In Plate V we see four conventional renderings of the lotus. All details and accidents are eliminated. Only characteristic lines are retained and even these have undergone modifications prompted by the individuality of the artist. However, in each case, the law of growth has been expressed and the arrangement of parts can be traced back to the natural flower as in Plate VII.

Sometimes the law of growth is disregarded as when a

*A "motive" in design may be one of two kinds, natural or purely imaginative; a natural motive may be any form of nature, as animal, plant, crystal, cloud, brook, wave, road, or any landscape feature used as material in design. A purely imaginative motive is any straight or curved line expression, or any abstract shape bounded by straight or curved lines.

flower is separated into its parts and some of these parts enter into new combinations as in Plate VIII. In this border and surface pattern the motive taken from the cornflower, Plate VI, has been reduced to a mere symbol which shows almost no elements of growth. It is like an abstract shape and lends itself easily to some of the laws of arrangement such as rhythm or repetition.

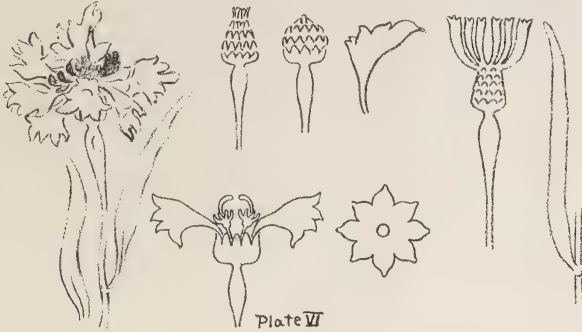


Plate VII

The Moors were prohibited by their religious beliefs from portraying any living thing. In spite of these limitations they have given to the world one of the most beautiful styles in ornament. Like all designers they have depended on the

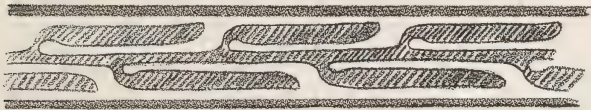


Plate VII

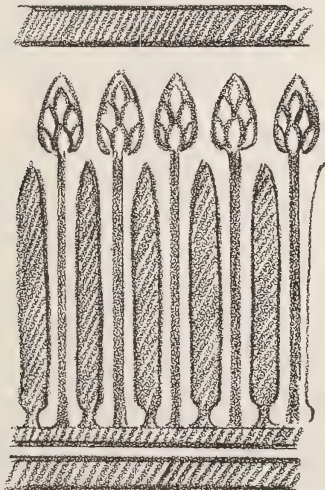


Plate VII

language of line, mass, and color, but unlike the designers of other nations and beliefs, they have not dared to go to nature for material. In spite of this, the musical line quality of their intricate patterns finds its prototype in the growth of a plant. Their minds, keenly alive to beauty, could not help but be influenced by the beauty offered by nature. Without actually copying nature, they were influenced by her in every line. This can be seen in Plate IX.

The art movement of the present time, known as L' Art Nouveau, is another instance in which the consistent and

rhythmic quality of natural forms has influenced design. See Plate X.

The long swinging lines of stem and leaf are material whose possibilities of adaptation appeal strongly to the artist's mind. He finds in them certain structural features that he can easily relate to an object. Unfortunately, much of the so-called Art Nouveau ornament is decadent because it violates the laws of composition, in being too ornate and undignified.

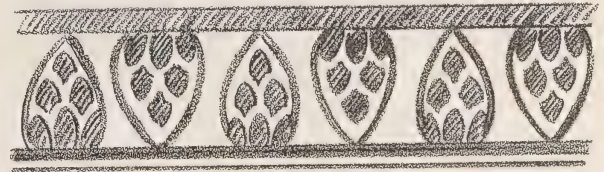


Plate VIII

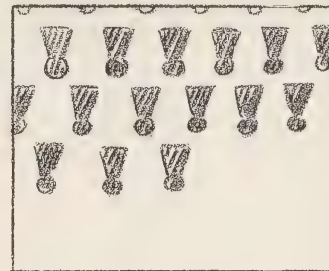


Plate VIII

It appears, then, that to make a convention of some motive, we are influenced by nature but need not necessarily show the exact source. A plant must be changed so as to adapt it to its new function. Dresser says: "Mere imitation is not ornamentation and is no more art in the higher sense of the term, than writing is itself literature, for in the production of ornament there must at least be adaptation. Our so-called natural wall papers well illustrate the first or most elementary step taken towards the production of orna-



Plate IX

ment, for adaptation has been considered so far as is absolutely necessary, in order that the design may repeat in the mechanical manner necessary to its production. If mere imitation is ornamentation, then the ornamentist must at once give place to the photographer, who by his art repeats natural objects

with far more accuracy than the most careful draughtsman; but photography cannot invent, as it is devoid of the mental

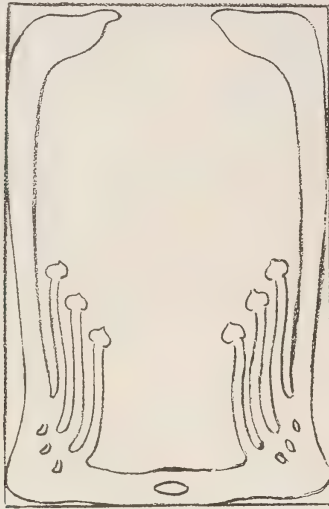


PLATE X

imaginative faculty, for the working of the mind is essential to the production of decoration."



Plate XI



Plate XII

LUSTERED POTTERY

IN one of our popular monthly magazines, a few years ago, there was an article on Mexican lustered pottery. In this article it speaks of the famous Italian pottery of the 16th century, decorated with paintings and brilliant lustre. This lustre work was iridescent and of remarkable beauty. The art of producing it was borrowed from the Saracens and improved on by the Italians. This style of pottery decoration soon passed out of fashion and the art of making it became lost. The nearest approach to it was the copper lustre of the English potters in use about a century ago. Of late years much money and labor have been expended in trying to learn the secret of this lost art, but without success.

In 1887 Charles Dudley Warner astonished the art world by the discovery of a half-dozen specimens of pottery, decorated in rude relief, but entirely covered with iridescent lustre of the same quality as the best old Italian pieces, in

Sir Gardiner Wilkinson expresses himself similarly: "The imitation of natural objects for mere ornamental purposes usually disagrees both with the materials used and the place where they are introduced; it is also an indication of poverty of invention and a deficiency of taste for design. To obtain ideas of ornamental art, nature should be carefully studied, and the beauties she presents should be fully understood, but she should not be directly copied."

To adapt a motive we must avoid detail, we must simplify by rejecting any parts that are accidental or that will interfere with an almost symbolic interpretation of the motives as in Plates XI and XII. In its use it should never seem to be an added thought; that is, it must not be applied, but must be a necessary part of the structure. A handle on a vase may have the appearance of being stuck on, or it may be a part of the structural plan of the vase. Ornament ought to be considered in the latter or structural sense.

It often happens that the decoration of an object appeals to the observer more strongly than the object. In such a case the balance has been disturbed. Sometimes this is due to the convention of the design, especially when its lines are not consistent with the structural lines of the object.

It follows, then, that while some skill is required in selecting the characteristic lines of a motive, and in making a convention of it, more skill is required in adapting it to some form. This ability to adapt the motive to form requires a knowledge of consistency of line, adjustment of areas and harmony of color.

Mexico. This discovery gave rise to the question: were these wares the independent discovery of the Indians who made them, or was the art transmitted to the new world from Italy? This question has not been satisfactorily answered. Since then pottery of the same description has been found in New Mexico also, made by the Indians.

STUDIO NOTE

Mrs. Margaret Sellers of Belle Plaines, Ia., will remain in Miss Stewart's studio during her absence in Europe and carry on her business.

In the mission furniture group is found a pretty dressing table to which is attached a square mirror set in a heavy frame of dark oak. On either side of the mirror are sconces for holding candles.



PLATE DESIGN—MARIE CRILLEY WILSON

Outline design on plate with pompadour red; fill in with gold; background of Capucine Red and a little Deep Red Brown.



COWSLIPS

Austin Rosser

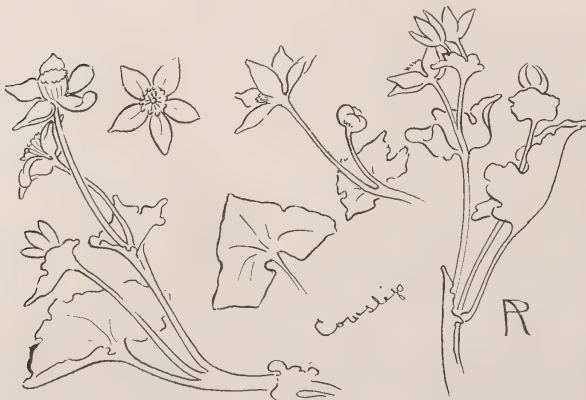
Use two shades of soft blue. The darker spaces and outlines are flat enamel which is fired before ground laying over entire surface a lighter shade of blue.

CHINESE WORKMANSHIP

IN the metal room of the Museum of Fine Arts there has been placed on exhibition some remarkable specimens of Chinese and Japanese pewters. In these days, when old pewters are the rage among collectors, these examples from the orient will be indeed a revelation.

The making of pewter in China extends back to the 10th century, and in Japan to the 16th century. Its manufacture in the latter country was derived from China, but once introduced, it was energetically fostered by the rulers of Japan.

In the present collection, the object which is probably most impressive is the great Chinese covered jar in case 9, which dates from the King dynasty, in the 14th century. It is



eight-sided, and is very graceful in line; slender and narrow at the base and gradually widening upward.

The library incense of three pieces is another remarkable piece of work. A supple monkey, dressed in brass pantaloons and a collar of leaves, holds aloft a leaf as a tray. The incense burner itself is severe in line, by way of contrast.

There is also a teapot of unusual workmanship, with channeled sides, a jade spout, handle and knob. This is from the 17th century. It has an unusual combination of metal and stone surfaces.

In the next case are two inlaid pewter salvers with pictures on their surfaces in brass. These pictures represent the great Yu, who turned back the waters from primeval China.

Among the Japanese pewters is a delicate ovoid vase with speckled surface, and one in the form of a bamboo stem with brass inlays. There is also a double basin by Suzuya Zayemon of inimitable surface and color. This dates back to early in the 18th century.—*Boston Evening Globe*.



Walter K. K. K.

MAY, 1904
SUPPLEMENT TO
KERAMIC STUDIO

PEACOCK STUDY—F. HURTEN RHEAD

PHOTO-CHROMOTYPE ENG. CO., PHILA.

COPYRIGHT, 1904
KERAMIC STUDIO PUB. CO.
SYRACUSE, N. Y.



DESIGN FOR WASH BOWL AND PITCHER IN BLUE AND GREEN—ARTHUR KIDD

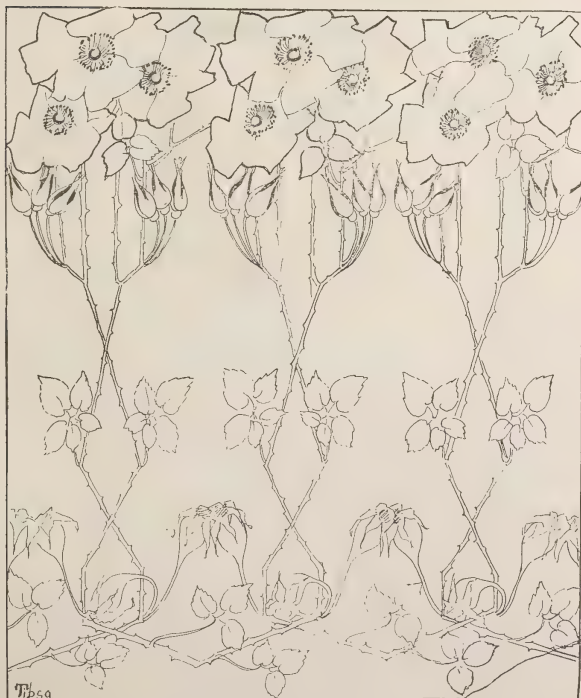


DESIGN FOR CUP, SAUCER AND PLATE—M. L. CANDLER

To be executed in Yellow and Green, gold outlined with Red, Brown or Black. Tint edge to design with Yellow or Green.



WILD ROSES—HENRIETTA BARCLAY PAIST



LAY in with flat washes. The flowers with pink (Carminé 53, Dresden or any good pink). The centers, Yellow; stamens and stems, Sepia; leaves and buds in a delicate green (Moss Green with a touch of Dark Green). The seed pods or fruit, a bright red (Pompadour or Deep Red Brown).

The background may be a combination of blue (Russian Green), cream (Yellow Ochre) and green at the base—or it may be carried out in different tones of green. Dark at the base and behind the flowers and pale through the middle.

In a den or a small sleeping room a wall cabinet is a great convenience and frequently an excellent substitute for the larger case which space forbids. Of dark quartered oak, with burnished copper fittings, the spaces on either side of the little cabinet in the center are just the thing for the pet books that every one owns and always likes to have within reach, while on top some treasured piece of pottery or crystal may be advantageously displayed. The central cabinet makes a handy receptacle for a variety of articles and the decoration of the door, may be ornate, the burnished copper handle and fancy design on the lower panel affording an excellent contrast to the dark brown wood.

One of the latest fads in belt buckles, and, in fact, jewelry of every kind, is the rage for white coral. It is not very expensive and is most ornamental and becoming. Red coral has been fashionable for the past two seasons in combs, chains, buckles, etc., but now white has completely captured the lead, even for men, as sleeve links and studs.

THE CRAFTS

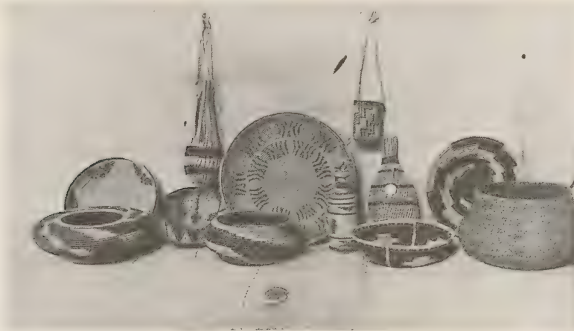
WOOD CARVING AND PYROGRAPHY. LEATHER AND METAL. BASKETRY, ETC.

Under the management of Miss Emily Peacock, 6 Brevoort Place, Brooklyn, N. Y. All inquiries in regard to the various Crafts are to be sent to the above address, but will be answered in the magazine under this head.



THE Annual Spring Exhibition of The New York Arts and Crafts Society was held at the Guild House, 109 East Twenty-third St. from March the 22d until March 26th. The exhibition showed much interesting work in the various branches of applied art and a marked improvement on that of a year ago. The exhibition of baskets deserves great praise. The workmanship was good, there were many good shapes and interesting designs. Miss Mary White's moth basket was beautifully woven, the colors in the moths were soft and harmonious, particularly suitable for the weave used.

Miss Mary White Miss Acker Mrs. Carl Hollander Mrs. Gates



Mrs. Carl Hollander Mrs. Gates Mrs. E. S. Thompson Mrs. J. S. Hockenhall

From the Belchertown Arts and Crafts Society Mrs. E. S. Thompson sent a copy of a famous Indian rattle snake basket in brown and natural raffia and Mrs J. S. Hockenhall a copy of a Navajo Indian sacred basket used in the marriage and other religious ceremonies. The white pathways in the design were for the use of the Spirit in passing in and out of the basket.



Six baskets of Mary Frances Dorrance Annie S. Kendall

From the Greenfield Arts and Crafts Society Mrs. Carl Hollender sent some good shapes. Miss Brown's cologne

bottle in brown and natural raffia was very attractive as also the twine baskets and flasks by Miss Acker.

The work of Mary Frances Dorrance is always attractive, there is a bigness and firmness about her baskets combined with the beautiful tones of the natural grasses, the husk of the corn and other materials used.

Miss A. S. Kendall's covered cracker jar in flat reeds and rattan in natural color, with design in green, was something new, as also her covered mason jars with reed handles for carrying. The small work baskets by Miss Sara G. Norrie were exquisite, they were made with a bodkin from Sicilian palm, and especially attractive was the one in brown and natural color.



Mary Frances Dorrance

Many of the rugs and textiles were delightful in color quality and texture, notably the hand spun and woven hangings from Berea College, Kentucky, and the Russian homespun covers for tables and cushions designed and worked by Mary Francis Dorrance in natural grasses. A word must be said in passing of this charming handiwork, the color and texture of the material, the simple designs worked with the grasses, possess a quality that is individual and pleasing.

Mrs. Priestmans' Martha Washington rugs, those of Mrs. A. B. Deady and Miss A. M. Hicks, were good in color quality and workmanship. Miss Hicks' hangings and cushion covers

in cotton and raw silk are called Batiks, these were very interesting in treatment, being a revival of the primitive way of getting a design on cotton.



Miss A. M. Hicks

There was quite a little metal work and jewelry, but the different styles of work in jewelry would have shown to better advantage if more space could have been given to each exhibit.

Dr. Busck

Dr. Busck



Miss C. Ogden

A. M. Froehlich

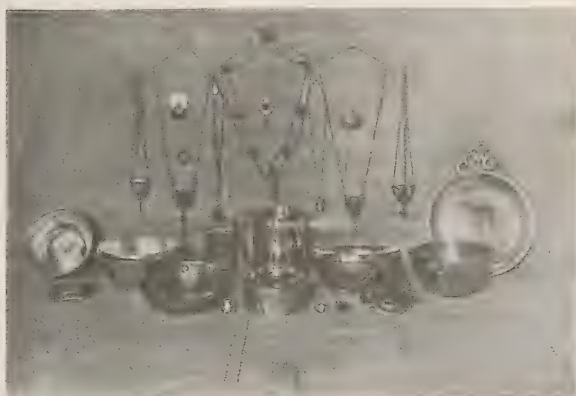
E. F. Peacock

A. M. Froehlich

We illustrate some hammered copper plates, also one of excellent workmanship in copper and brass and a silver repousse bowl by Dr. Busck; a well proportioned and simply wrought brass tray and snuffers by Miss C. S. Ogden; two very quaint and refreshing casserole covers, a silver repousse

bowl, two cleverly made rings, a silver pendant set with fresh water pearls and two silver brooches by Ava M. Froehlich.

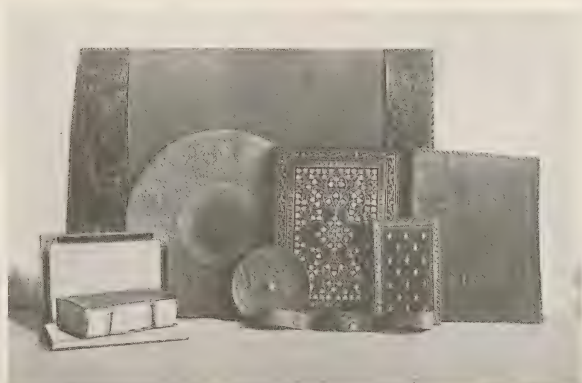
An enamelled silver match box and a delightful silver bowl by Miss M. P. Winlock; a silver pendant set with turquoise matrix and two silver buckles by Mary E. Peckham, who also had some very attractive silver chains set with Thompsonite. Mrs. K. S. Wrights' silver porringer, a dainty gold pendant and a silver ring by Ellen P. Day. A pendant and silver brooch by



A. M. Froehlich M. E. Peckham J. Pratt E. F. Peacock A. M. Frazer E. P. Day K. Wright H. G. Rogers Dr. Busck Miss Copeland M. P. Winlock M. C. Knight

J. E. Pratt; a silver necklace set with Amethysts, a silver pendant set with Mexican opals, a pair of quaint silver shoe buckles and a child's silver cup by Emily F. Peacock and a cleverly beaten bowl by G. H. Rogers.

Mrs. Busck



Miss E. G. Starr
Peter Verberg

Mrs. Busck

Peter Verberg

Miss E. G. Starr

The tooled leather writing pad done by Mrs. C. H. Busck was treated in an interesting way, also the portiere by the Misses Ripley, but the exhibit in this craft was very small, there was also very little work in wood carvings.

The collection of hand bound books' was of more than ordinary interest. The binding of the Greek Missal by Miss E. G. Starr, Chicago, was a good example of the quality of her work; the plaited leather thongs that fastened the Missal together gave it an added charm. The bindings by Peter Verberg, Chicago, do this craftsman the greatest credit. The opened book illustrated shows the careful interior work as well as the careful exterior finish. Miss Marot of Philadelphia showed also some good work in this line.

KERAMIC STUDIO

There was much work from the hands of the potter this year, Grueby, Dedham, Newcomb, Van Briggie, Volkmar, Mrs. Poillion and Miss McLaughlin being represented by examples of their well known work.

Several pieces of grand feu porcelains, fired in the studio at cones 9 and 10, were exhibited by Mrs. Alsop-Robineau, Mrs. Robineau uses mostly mat glazes, and the colors, so evidently a part of the vase, combined with a pleasing



BUILT POTTERY—MARSHAL FRY

Among the new work in this art we illustrate a group of interesting pieces of built pottery from the Alfred School, and another fine group by Mr. Marshal Fry. Mr. Fry's exhibit possesses an individual quality. The lines in every piece are

texture, make her work quite unusual. A small bowl with carved design in mat green and reddish mat brown, and a small jar with cover, in mat orange, were fine examples of color and texture.



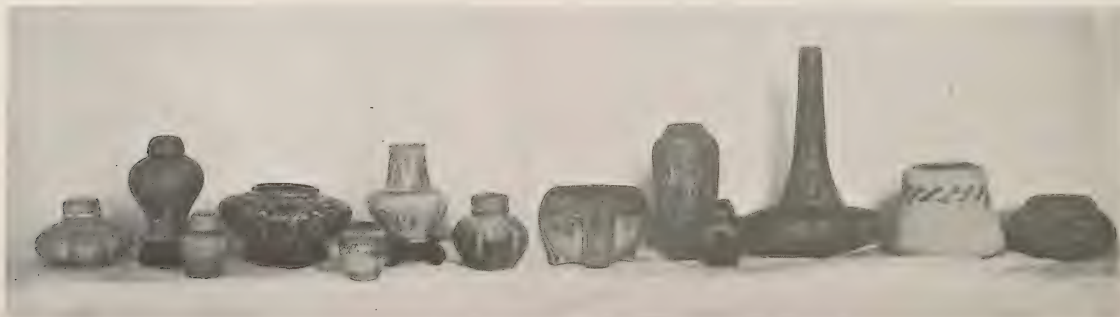
Built Pottery—School of Ceramics, Alfred, N. Y.

so well thought out and frankly expressed in the simplest way. The note of color is refined and in perfect harmony with the shapes.



Grand Feu Porcelains, mat glazes—Adelaide Alsop Robineau

The jury of selection requested both Mrs. Robineau and Mr. Fry to send a number of pieces to the Art Palace of the St. Louis Exposition.



GRAND FEU PORCELAINS, MAT GLAZES—ADELAIDE ALSOP ROBINEAU



THE MAKING OF A CASSEROLE COVER

Ava M. Froehlich

ONE of the most attractive serving dishes for the dinner table is an earthen baking dish, transformed into a real art by adding a metal cover, which may be decorated with work of either a chased or an etched design of simple style. These are not difficult to make. Any one with a slight knowledge of metal work will have little trouble and will incur but slight expense in their manufacture.

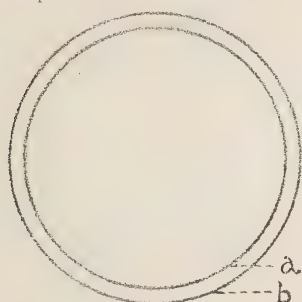


PLATE I

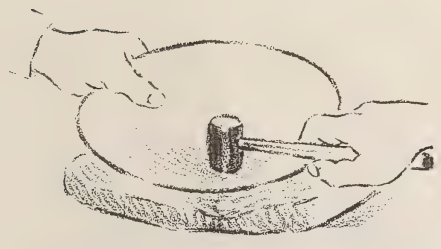


PLATE II

THE MATERIALS

10 inch of 21 gauge copper, 1 strip copper, $\frac{1}{8}$ x $\frac{1}{8}$ for the handle. The medium size casserole measures about 10 inches in diameter.

It is better to have the casserole to be covered on hand, as each is somewhat irregular in shape. These can be purchased at any department store for about 50 cents.

PROCEDURE

Invert the dish on the copper and with a sharp pointed tool trace its outline, taking care to get accurately the shape of the lip of the casserole. Outside this irregular circle and $\frac{1}{2}$ of an inch from it, draw a second parallel circle. Cut the copper along this line. Place the metal upon the sand bag (Fig. II)



PLATE III



PLATE IV

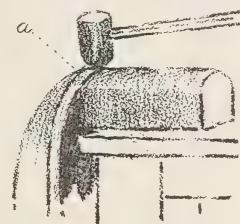


PLATE V



PLATE VI



PLATE VII

and, with the round end of the wooden mallet, pound into it, beginning near the outer edge and continuing with close, even strokes to work spirally until the centre is reached. This will form the dome shape of the cover as shown in Fig. II. If the hammer marks have made the surface uneven, this may be remedied by going over the metal again in the same way.

To refine the metal place it on the anvil and pound closely with a hard wood or horn hammer. The edge may now be turned over to form a true lid by placing the circle ('a' Fig. V) on the edge of the hard wood profile which is held firmly in a vise, taking care to fit it carefully to the casserole.

APPLYING THE DESIGN

To prepare the metal for the design, clean it by immersing it in a sulphuric acid bath, made by dissolving 2 tablespoons of sulphuric acid in 2 gallons of hot water. Rinse and dry thoroughly. Then put it on the chasing pitch with the concave side up, melting the pitch and forming a good bed of it upon a block of wood, pressing the cover into it. Allow the pitch to cool. The following are appropriate motives for the design: Ducks, geese or rabbits, arranged in a border, or three turkeys with spread tails, crabs with suggestive lines of water and lobsters, fish or turtles, treated in a simple way. Scratch the design on the inside of the cover with a metal point, and, with a large dull outline tool (Fig. VI) trace the entire design by

holding the tool firmly in the left hand at a slight angle, against the metal and, with a chasing hammer strike the tool lightly to send it along the outline. Then with a heavy chasing tool (Fig. VII) pound down all the parts of the design that are to be in relief, having some parts more prominent than others. This fuller relief may be obtained by more vigorous hammering. Another method is to outline only the important parts of the design leaving the rest for suggestive modeling in the chasing. If the crab design is used, outline only those parts of it that are to be in highest relief as, for instance, the upper part near the eyes, and the extreme ends of the body. The claws may be treated in the same way, by outlining part of the back toward the tip where there is a chance for a decided accent. Treat the

tooth-like points on the inside with strong touches of relief. All the joints may be pounded down with the large chasing tool and one a trifle smaller of the same shape. No outline is necessary here. Suggestive lines of water running across at a slight angle after the relief is finished, will be very effective if put in simply.

Now we are ready to take the cover from the pitch by heating it with a gas flame, with sufficient intensity to melt the pitch. (A Bunsen burner is best here). Clean with kerosene and reverse the cover on the pitch. Refine some of the shapes by putting the background down with the smaller chasing tool, and accent others with the outline tool.

For the handle pound the ends of the strip of copper, $\frac{3}{8} \times \frac{1}{2}$ after annealing, until they are quite thin and large. Saw these ends into any shape suitable for riveting and turn the handle under and outward to suit the fancy. The handle in the illustration has been sawed through part of the length and each end has been turned forward and riveted onto the cover.

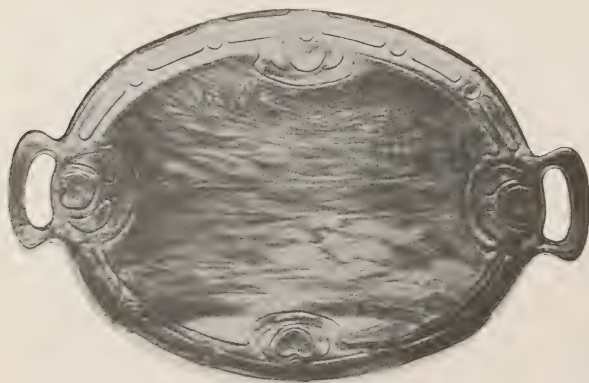
ANSWERS TO INQUIRIES

G. W.—There is a Cuban wood called Mahouja, it is a greenish grey in tone, rather loose grain and easy to carve. You would get a nice effect if you finish it with a dull polish.

Odette—You will find much information on metal coloring in Arthur H. Hiorus' book on that subject, published by MacMillan & Co., New York.

K. M.—Jade is a very hard stone, but you can polish it on a wooden wheel with pumice and water or emery, with patience added. The greener the stone the more expensive.

Mrs. S. J. B.—The leaded lines in your cabinet doors could be finished with a dull black paint, but a softer and more natural finish comes by exposure to the atmosphere in a very short time. The copper straps and pulls such as you want for your desk, will be hard to find in the shops; they can be made by hand though, by almost any metal worker.



TRAY

Mrs. K. Wright

The tray by Mrs. K. Wright was made of Circassian Walnut, and the design carved in low relief. Turpentine and wax was used for a polish.

ANSWERS TO CORRESPONDENTS.

L. G.—Flux is used with mineral colors to insure a good glaze— $\frac{1}{2}$ as much flux as color for painting, $\frac{1}{3}$ as much for tinting, except for Apple Green, Sevres or Mixing Yellow and Pearl Grey which need no flux, too much flux weakens the color. To protect your eyes in doing pyrography work, you might use glass goggles, but can you not hold your work in such a way that the smoke will not come to your eyes. To get an underglaze effect one must either lay the tint on the biscuit and put glaze over it, or fire very hard the tint or ground put on over the glaze.

E. W. R.—You will find a good naturalistic study of grapes on a tankard published in *KERAMIC STUDIO*, and a fine conventionalized design of grapes for a punch bowl in Sept. 1902, *KERAMIC STUDIO*.

If you wish to fire your outline first, the only way to keep it clear is to wipe out the design with a cloth damp (not wet) with alcohol, after dusting or tinting the background, then paint in design and after retouching and firing go over the outlining again carefully with gold or black as the case may be. However, we would not advise firing a gold outline before putting in background as it is almost impossible to free it entirely from color—in that case draw design in India ink which will fire out, then when the painting, etc., is finished and fired, apply your gold outline.

If you use the English enamel or Aufsetzweis in powder color, we would advise mixing with just enough Dresden thick oil to hold it together—breathing on it frequently while mixing—thin with oil of lavender, breathing on it again till it follows the knife in a little point and does not settle back as if oily.

E. Y.—Underglaze painting is done on the biscuit or green clay before glazing—biscuit is the fired but unglazed body. Underglaze painting can usually be distinguished from the overglaze by its uniformly bright glaze and transparency of color. An overglaze painting is seldom uniformly well glazed and the color appears on the surface instead of being part of, or under the glaze.

Soft enamel is enamel that will only stand a light fire and hard enamel is that which will stand a hard fire.

Soft paste china is not made for amateur decoration—in fact the real soft paste is not made now-a-days—it would take an expert to tell the difference between soft and hard paste china. As a rule however, the French and German wares are hard, the English softer and less reliable for amateur work but very fine if it does come out well. A good piece of china is of a pure white, rather creamy than bluish in tone, without flaws or black specks. We seldom get perfect pieces in this country as the "seconds" only are sold for decoration, the best being selected for decoration at the manufactory. Almost all makes of foreign china are good for decoration. Haviland is always reliable as are most of the marked French and German pieces—the unmarked may be, but you must take your chances. Derby is not made for amateur decoration but it is one of the finest of English porcelains. Any further information you may desire we will be glad to furnish if your name is on our subscription list.

S. N. C.—If raised paste cracks while still adhering to the china, it doubtless had too much oil or turpentine in mixing—use just enough oil (fat or thick oil of turpentine) to make the powder stick together, breath on it frequently while mixing, thin with oil of lavender, breathing on it while mixing until it will stand up without softening. Work this into the cracks in your paste until you can get no more in, then dry thoroughly, cover with gold and fire, it will at least look better than before even if it should not come out perfect.

M. H. M.—For a black background, such as you describe, a mat black is used and dusted on with grounding oil. A very fine old piece of sandpaper is sometimes used for smoothing after firing, if it comes out rough. It is fired the same as anything else—a good rose color heat.

Mrs. B. G. D.—A discussion of the composition of colors is quite beyond the field of *KERAMIC STUDIO*, as we go into practical rather than scientific instruction—the latter can be studied at length in such works as Brongniart and Seger, which can be found in the public libraries. For practical use the only necessary information is that the gold colors may improve other colors in mixture but are always spoiled themselves by the adding of any other oxide. Carmines, pinks, violets and purples are gold colors. The perfect overglaze fire brings out the carmins or pinks a good rose color—too little fire leaves them brick red, too much gives a bluish tinge. The iron colors are the reds and browns, these lose in depth if fired too hard, they cannot be mixed with enamel as they fire out. The yellows are the strongest colors and should be used with care when combined with iron or gold colors as they destroy them if used too strong.

The blues are generally reliable and can be mixed with any color. The greens can be used with confidence except Moss green, Coalport green and other greens of that order, which, under certain conditions of the kiln not well understood, come out brownish in spots. Any further information from the point of view of the chemist must be sought in scientific works on pottery, porcelain or color making.

H. S. L.—Almost any of the good conventional designs given in *KERAMIC STUDIO* would look well in gold and white, a raised gold border and initial on a plate should be worth from \$3.00 to \$30.00 a plate, according to elaborateness and fineness of execution. A simple design well executed should be worth perhaps, \$5.00 a plate. Flat gold designs are effective and much cheaper if not really nicer for use than raised work. Will try to give some good alphabets soon in *KERAMIC STUDIO*. There is no known make of pink that will not turn purplish if overfired and brick red if underfired.

E. M. H.—In decorating glass, the same mediums are used as for china. The paints are specially prepared for glass, as is the gold for flat use. The Hancock's raised paste for china can be used on glass and the Roman gold for china can be used over it. The enamels are specially prepared for glass. Glass jewels are set in raised paste which is afterward gilded.

KEEP THE FIRE ALIVE

KERAMIC STUDIO

CONTRIBUTORS

MRS. J. F. BERNIES	✽	✽	✽	✽	✽
MRS. K. E. CHERRY	✽	✽	✽	✽	✽
MR. TAXILE DOAT	✽	✽	✽	✽	✽
MISS EMMA A. ERVIN	✽	✽	✽	✽	✽
MISS EDNA GAMBLE	✽	✽	✽	✽	✽
MR. RANDOLPH I. GEARE	✽	✽	✽	✽	✽
MR. RUSSELL GOODWIN	✽	✽	✽	✽	✽
MISS LETA HORLOCKER	✽	✽	✽	✽	✽
MISS HELEN G. HASKELL	✽	✽	✽	✽	✽
MISS IDA A JOHNSON	✽	✽	✽	✽	✽
MR. ROCKWOOD MOULTON	✽	✽	✽	✽	✽
MISS EMILY F. PEACOCK	✽	✽	✽	✽	✽
MRS. HENRIETTA BARCLAY PAIST	✽	✽	✽	✽	✽
MISS JEANNE M. STEWART	✽	✽	✽	✽	✽
MISS FLORENCE E. SEGSWORTH	✽	✽	✽	✽	✽
MISS CARRIE E. WILLIAMS	✽	✽	✽	✽	✽
MRS. YOUNG	✽	✽	✽	✽	✽

JUNE MCMIV Price 35c. Yearly Subscription \$3.50

A MONTHLY MAGAZINE FOR THE POTTER AND DECORATOR

[The entire contents of this Magazine are covered by the general copyright, and the articles must not be reprinted without special permission.]

CONTENTS FOR JUNE 1904

	PAGE
Editorial	27
Nasturtiums (Supplement)	Henrietta Barclay Paist 27
League Notes	Ida A. Johnson 27
Chinese Lily	Emma Ervin 28
Narcissus	Mrs. J. F. Bernies 28
Decorative Study of Chinese Lily	Emma A. Ervin 29
Grand Feu Ceramics, X	Taxile Doat 30-32
Design for Belt Buckle	32
Blue Prints of Flowers	Leta Horlocker 33
Wisteria	Edna Gamble 34
Narcissus	Carrie E. Williams 35 and 48
Pitcher—Wisteria Design	Russell Goodwin 35
Punch Bowl in Grapes	Jeanne M. Stewart 36-37
Tea Set	Florence E. Segsworth 38
Tile	Rockwood Moulton 39
Korean Ceramics	Randolph I. Geare 40-42
Cup and Saucer—Conventional Dolphin Design	Mrs. Young 43
Wild Lilac	K. E. Cherry 44
The Crafts—Hand Book Binding	Helen G. Haskell 45-46
Silver Spoon Dish	} Emily F. Peacock 47
Candlestick	
Answers to Correspondents	48

Some Leading Agencies of Ceramic Studio

We take pleasure in mentioning a few of the leading agencies for the sale of the KERAMIC STUDIO, where, also, subscriptions may be placed:

Beaver Falls, Pa.—William T. Reeder, 1208 7th Ave.
 Boston, Mass.—Miss E. E. Page, 286 Boylston St.; Smith & McCance, Old Corner Book Store.
 Brooklyn—A. D. Mathews & Sons, Fulton Street.
 Buffalo—Mrs. Filkins, 609 Main Street.
 Chicago—A. C. McClurg & Co., Brentano's; Burley & Co.;
 Cincinnati—Miss M. Owen, 245 Elm Street; A. B. Closson, 4th Street near Race; Traxel & Mass, 4th Street, near Elm.
 Cleveland, Ohio—Vinson & Korner, 150 Euclid Ave.
 Columbus, Ohio—Lee Roessler, 116 So. High Street.
 Dayton, Ohio—W. W. Kile & Co.
 Denver, Colo.—E. Meininger, 807 16th Street.
 Detroit, Mich.—L. B. King & Co.
 Hartford, Ct.—E. M. Sill.
 Grand Rapids, Mich.—Miller, Wolfe Co.
 Indianapolis, Ind.—Keramic Supply Co., Lemeke Building.
 Kansas City, Mo.—Emery, Bird, Thayer Co., Geo. B. Peck Co.
 Louisville—Louisville Book Store.

Minneapolis, Minn.—Minn. Art China Co., 607 1st Ave. So.
 New York City—Brentano's, Union Square; M. T. Wynne's, 11 E. 20th St.; The Fry Art Co., 36 W. 24th St.; Wanamaker's; American News Co. J. B. Ketcham, 107 W. 25th Street; M. J. Whaley, 430 5th Ave.
 Newark, N. J.—Keramic Novelty Co.
 Oakland, Cal.—Smith Bros.
 Omaha, Neb.—Megeath Stationery Co.
 Philadelphia—Wanamaker's.
 Pittsburgh, Pa.—Otto Schaffer & Bros.; Kurtz, Langbein & Schwartz; R. S. Davis & Co., 346 Fifth Ave.; John G. Yergan, 36 Fifth Street.
 Reading, Pa.—Rowland's Book Store.
 Saratoga Springs—Robson & Adee.
 San Francisco—Mrs. M. E. Perley, 207 Post Street.
 Sioux City, Ia.—J. K. Prugh, 312 Nebraska Street.
 St. Louis—F. Weber & Co.; A. S. Aloe & Co.
 Syracuse—Wolcott Book Shop; Welch & Hollingsworth; W. Y. Foote; A. L. Varney & Co., 336 S. Salina Street.
 Tacoma, Wash.—Art Exchange, Mrs. Mead.
 Toronto—The Art Metropole.
 Warren, Pa.—Alzora Bashline.
 Washington, D. C.—Woodward & Lothrop,
 The Magazine may also be ordered from any news dealer or book store in this country, who can procure it through the American News Company New York, or its branches.

KERAMIC STUDIO

Vol. VI, No. 2

SYRACUSE NEW YORK

June 1904



PROFITABLE as well as a pleasant summer pastime for idle sunny hours, is the making of blue print silhouettes of flowers, leaves, grasses and insects. We give some of these in this number and they illustrate very well the points to be gained: a big view of things, the losing of detail and unnecessary shading, a clearer insight into the decorative lines and outlines of objects. From these photographic studies it will be an easy step to a broad conventionalization.

The flowers are laid on blue print paper, placed on a board and covered with glass, a few trials will have to be made to get just the right exposure. Be careful in arranging the study that there are not too many leaves or flowers as the result will be confusion. Try and *compose* a panel picture by the position of flowers and stems on the rectangle of paper. A collection of these prints in a portfolio will be found of great value in your winter work.

✱

We regret to announce that the article on color by Mr. Hugo Froehlich which was to have been given in June *KERAMIC STUDIO* is unavoidably postponed until the July issue. The Class Room criticisms on Jack-in-the-Pulpit will be given in August. The Dandelion will be the subject for September, and for October, the Narcissus; several drawings of the latter flower are given in this issue.

✱

We congratulate the New York Society of Ceramic Arts on having selected Mrs. Anna B. Leonard for president this year and trust the society will continue to re-elect her for some time to come. We shall now look for the progressive movement that we have preached and prayed for these many years.

✱

A new book on "Principles of Design," by Batchelder, has just been placed upon our study table, it has just been gotten out by the "Inland Printer" of Chicago. It is beautifully printed. The general plan of instruction is similar to that of Mr. Dow and Mr. Froehlich and the book is copiously illustrated in color and half-tone and is worth including in one's study library.

✱ ✱

NASTURTIUMS—(Supplement)

Henrietta Barclay Paist

COLORS—Albert Yellow, Yellow Ochre, Yellow Brown, (Dresden); Dark Brown, Deep Red Brown, Ruby Purple, Brown Green, Dark Green, Moss Green, J., Carnation No. 1, (Lacroix); Blood Red, (Bischoff), or $\frac{1}{2}$ Ruby mixed with $\frac{1}{4}$ Deep Red Brown; Copenhagen, (Bischoff or Fry); White Rose, (Bischoff); Russian Green, (Bischoff or Fry).

Use Deep Red Brown, Blood Red, Brown Green, Dark Green, Copenhagen and Dark Brown as modeling colors; Yellow Ochre, Yellow Brown, Albert Yellow, Carnation, Ruby Purple and Moss Green for glazing (second fire.) The darkest red flowers are modeled with Blood Red, glazed with Ruby and

the modeling strengthened when necessary with Blood Red and even a touch of Dark Brown or Black. The carnation or yellow red blossoms are first modeled with Deep Red Brown, the veining in Blood Red and glazed with Carnation. The pure yellow flowers are modeled with White Rose, glazing with Yellow.

The background is painted with Brown Green, Dark Green and Dark Brown in the strongest parts, blending into Yellow Brown and Yellow. In the cooler tones, Russian Green and Copenhagen blend gradually to the warmer tones by glazing the other colors over and so drawing together into a harmonious whole.

✱ ✱

LEAGUE NOTES

THE annual meeting and triennial election of officers of the National League of Mineral Painters was held on May 5 at the National Arts Club in New York. After the reading of the reports the following officers were unanimously elected for a term of three years:

President, Mrs. B. B. Vesey, Chicago; Vice-President, Miss I. C. Failing, Denver; Rec. Secretary, Miss M. E. Iglehart, Chicago; Cor. Secretary, Mrs. G. P. McMurtry, Chicago; Treasurer, Mrs. C. A. Randall, Chicago.

The next order of business was the election of an Advisory Board of six to serve for one year. The following were elected: Marshal Fry, New York; Mrs. Worth Osgood, Brooklyn; Miss Boyd, Pittsburgh; Mrs. Davis, Boston; Mrs. Beachey, Chicago; Mrs. Smith, Newark.

The Treasurer gave a most gratifying report, being able to hand over a balance of \$415.08. During the three years \$2920.46 have passed through her hands, of which \$1487.64 represented the cost of the Pan-American, and the two traveling exhibitions.

Mrs. Vesey, the newly elected President, was present, and we believe all the members who had the pleasure of meeting her felt that the League was to be congratulated. We wish to bespeak for the new board which enters so auspiciously on this new term, the loyalty and help of every club and individual member.

As the chairman of the various committees could not be elected until the meeting in Chicago, there was more or less informal discussion about the next course of study, and the consequent exhibition which are the matters of most vital interest to the clubs. One proposition which seemed to meet with considerable favor, was that the next exhibition should consist of two parts, one on educational lines, carrying out in a progressive way the principles of the past comparative exhibitions; and another, without restrictions, excepting perhaps as to size, limiting each club to a small number of pieces, proportionate to the membership. It was thought this variety would add interest to the exhibition, while also giving an opportunity to those who might feel that the limitations of the study course were too narrow.

On the other hand, some felt that the restrictions give a valuable mental exercise, and should be looked upon from that point of view. It has been thought best to present these suggestions, thus hoping to draw out more, and we are sure the new board of officers will gladly receive and consider all, and

it is only by the fullest knowledge of what the clubs feel is wanted that they will be able to eliminate the least useful and decide upon what will be of the greatest good for the greatest number.

IDA A. JOHNSON.

MRS. B. B. VESEY, President,
6228 Wabash Ave., Chicago.

MRS. G. P. McMURTRY, Cor. Sec.,
6927 Normal Ave., Chicago.



CHINESE LILY

Emma Ervin

THE Chinese lily as we have it in America is generally grown in a shallow bowl of water with a few pebbles in the bottom. The bulbs are imported every year, as they never bloom but once, and the growth is most interesting. After being placed in water it will flower in a month's time, dainty, fragrant flowers, very much like our narcissus in form, only smaller and several flowers from one stem. The leaves are straight and flat, and with tall white flowers form a most pleasing arrangement.

VASE IN CHINESE LILY

For the most satisfactory results I would suggest that the outlining be done first, very carefully, with outlining black. Then after firing tint with dark green No. 7, allowing it to be light grey at the bottom and darkest at the top. Paint the leaves with olive and dark green. The flowers are white with yellow centers and may be shaded very little if desired.



NARCISSUS

Mrs. J. F. Bernies

FLOWERS, white, shaded with a greenish grey; centers, pale yellow in the edge of reddish brown. Leaves, blueish green in high lights, warmer green in other places. Background of soft grey tones.



NARCISSUS—MRS. J. F. BERNIES





DECORATIVE STUDY OF CHINESE LILY—EMMA A. ERVIN

GRAND FEU CERAMICS

X—FIRING—Neutral, Oxidising, Reducing

Taxile Doat

(CONTINUED)

THE regulation of the firing may be done in three different ways: *ordinary* or *neutral*, *oxidising* and *reducing*. Neutral firing has always and is still used by all porcelain manufacturers. It is the "go as you please" of empirics. It is easy to understand that if one throws wood into the fire mouths, little at first, more towards the end, the point of firing of kaolinic matter will sooner or later be reached. At Limoges, in Saxony, at Sèvres and everywhere that porcelain was made, the main result sought for was the brilliant whiteness of the ware. (This whiteness caused the public to prefer porcelain to earthenware against which porcelain makers had made a bitter fight. The whiter the porcelain the better it was adapted to decoration with the only palette known at first, that of the muffle fire.)

Manufacturers had observed that when, during the firing, there was an excess of smoke the porcelain had an unpleasant greyish tint. It was therefore absolutely necessary to avoid this smoking of the kiln. On the other hand the time of firing, with the labor and expense involved, always seemed too long, and it was important to push the fire so as to reach the end as rapidly as possible. Tossed between these two extremes, porcelain makers had succeeded in regulating the firing in an abnormal and empirical way, by selecting the wood, dividing the feeds, forcing into large fire mouths all the fuel they could stand, but at the same time airing the kiln everywhere with strong drafts, as if it was burning in the open air, with a violent wind. And as with this excess of fuel, the live coal accumulated in the fire mouths, and formed smoke, every two hours they were cleaned out. This severe operation, the taking out of the coal which had accumulated and obstructed the openings, scorched the skin of the firers, but they did the work bravely, as this coal was one of their perquisites. As soon as the fire mouths were clean, they became active again and the smoke disappeared to give place to the oxidising atmosphere. With this regular cleaning of the fire mouths, porcelain makers succeeded in obtaining very pure white after 30 to 34 hours firing. The oxidising action was strong but not complete, as it was active only at times. When the palette of *pâtes sur pâtes* was created at Sèvres, the cleaning of the coal was practiced regularly to preserve the oxidising atmosphere so necessary to the development of certain colors, such as the yellows of uranium, the pinks, mauves, turquoise and blacks which owe their brilliancy to this atmosphere. As the oxidation was insufficient this was remedied by the creation of air drafts through fire brick tubes X passing through the walls of the kiln (Fig. 49, p. 228, Feb. 1904). These tubes conveyed an excess of oxygen to the inside of the saggars where the colors were, which certainly, when it worked well, improved the tones wonderfully. But success depended on the stability of these tubes. If in their moving surroundings, they became displaced by a movement of the bungs or were obstructed by some unexpected cause, the flow of oxygen being imperfect, the colors did not come out with all their brilliancy, the decoration remained grey and dirty. I have seen many of these finely decorated pieces on which the air draft had failed to act.

The air draft, led into the channel at the bottom of the bung, follows it without any break to the top, ending outside after crossing the vault of the firing chamber. The points of entrance and exit of the air being fixed, at each firing these air passages must be carried between the bungs in the same way.

This empirical firing could not stand the examination of

serious and learned minds, trained in the logic of exact sciences. The Sèvres chemists, applying to ceramics the scientific processes which were used in metallurgy, solved the question of a purely oxidising or a purely reducing atmosphere by the relation of the sections of the chimney to the fire mouths.

Oxidising (Fig. 89)—If a narrow fire mouth corresponds to a large opening for the exit of the flame, the fuel is completely consumed under the action of the strong draft which the narrow fire mouth produces. As wood consumes only the amount of air necessary for its complete combustion, there rushes into the kiln an excess of air which devours the unburnt gases which may have been introduced. The atmosphere of the kiln is then called *oxidising*. As it is necessary to constantly increase the feeding of fuel in order to reach the high temperatures for the firing of porcelain, one has to face the following problem: the temperature will be lowered if, when feeding little wood, too much air is left to penetrate the kiln, or the oxidising atmosphere will be lost, if with an excess of fuel the smoke invades the firing chamber. There is a happy medium which practice alone will teach. It would be impossible to finish a firing if one tried to have an absolutely oxidising atmosphere all the time, while the contents of the kiln would be irreparably damaged if the reducing atmosphere was kept from beginning to end. The characteristics of an oxidising fire are, inside of the kiln, a brilliant white light, without any trace of flame or smoke, and outside, the absence of flame on top of the chimney. When a rush of flames is produced by the fall of a burning load of wood in the fire mouth, these flames should be bluish.

During an oxidising fire, the neutral firing which allows a rapid increase of heat, is adopted until the fall of cone 013, when it is necessary to begin oxidising, because unburnt gases which would be deposited on the pieces, would produce with the colors a pyrochemical combination which would injure or destroy them. It will be easily imagined that this kind of firing is much slower than the neutral or reducing ones. It lasts 3 or 4 hours longer.

Crystalline glazes are obtained only in a purely oxidising fire. Oxidising firing gives a slightly ivory tint to white porcelain.

Reducing (Fig. 90)—If on the contrary to oxidising, a large fire mouth corresponds to a narrow opening for the exit of the flame, the draft is insufficient and the wood which has accumulated in the fire mouth does not burn completely; carbonic oxide and carburets of hydrogen escape from it, and in the shape of a sooty smoke whirl in the kiln, mixed with the flame which then takes a reddish tint. This is the reducing atmosphere. It gives a greyish tint to porcelain. It would be dangerous to maintain the flame in this condition of saturation with smoke during the whole firing. It is necessary to keep this atmosphere only up to the fall of cone 06 inclusively. In this case the unburnt gases help the colors. They are deposited on and combined with them at the time of the fusion of the glaze. As soon as this vitrification is obtained, the fall of cone 06 occurring at about $\frac{2}{3}$ of the time of firing, one must change to oxidising to clean the kiln of all the carburets, which cannot have a good action any longer. If the reduction was continued much longer, the colors would lose their brilliancy and become blackish.

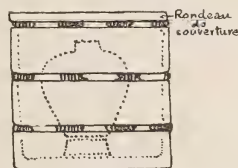
One will understand how important it is to handle well these two firings, the same colors developing in an entirely different way according to the condition of the atmosphere. So celadon of iron, a delicate jade green in reducing, remains greyish in oxidising. Red of copper, of crimson color in reducing, becomes opale or spotted green in oxidising. Uranium

is black in reducing, yellow in oxidising, etc. The limited space for these articles does not allow me to give the scientific reasons for these pyrochemical combinations.

Through the handling of the chimney damper and of the plaques on the fire mouths (Fig. 89 and 90), it will be easy to put into practice the theory which I have just explained. These fire mouth plaques are of the same material as the saggars but fired in the hottest part of the kiln. They must have the same length as the hopper of the fire mouth, and be half as broad as long.

The characteristics of a reducing atmosphere are, inside, flame striated with waves of soot which dim the view, and outside, on top of the chimney, a cap of red and black smoke, formed by the unburnt gases.

It is only in the reducing atmosphere that the fine flammé reds are produced. Their development is made easier by the arrangement of saggars. Instead of being entirely cemented with lute, openings from $\frac{3}{8}$ of an inch to 1 inch are left in the wads of lute which hold the saggars together, so that the flame will penetrate the latter and deposit carburets on the cupric glaze (Fig. 81). It is not necessary to saturate the kiln with smoke to obtain fine reds. A light cloud of smoke maintained up to the fall of cone 06 will do. The name of *flammés* has been given to these pieces because, contrary to other pieces, they are subject to the flame during the firing. Reducing firings are from 3 to 4 hours shorter than oxidising, but neither requires the cleaning of live coal out of the fire mouth, the latter being necessary only in neutral firing. When the coal has accumulated in the fire mouth, while reducing, it is left to burn out, the feeding of fuel being diminished until then.



Encastage des Flammés.
Les saggars sont incomplètement
lutés. Des intervalles sont
ménagés pour laisser pénétrer
la flamme. Fig. 81

By faithfully following these instructions, every detail of which has its importance, ceramists will be able to obtain from the fire the finest crimson reds as well as the most delightfully frosty crystalline glazes.

Those who have a baking chamber in their kiln will not need to give special attention to the baking which will be done while firing. But those who, like myself, have no baking chamber, will proceed as is done for an ordinary firing, without however cementing the saggars with lute. If they want a light baking, they will stop when cone 013 is beginning to curb; if they need a strong hardening, they will stop when cone 013 has completely fallen.

As a conclusion I will call the attention of firers to the following primordial points: to obtain a reducing atmosphere, the fuel must be accumulated in the fire mouth, and the exit of the flame must be checked as much as possible. Inversely, for an oxidising atmosphere, just enough fuel must be fed to the fire mouth to allow the progressive increase of the heat and the flame must have perfect freedom of exit.

It is necessary also to adopt a rational feeding of the fuel, and when one of the fire mouths is choked, not to take the coal out, but to even it up, or temporarily diminish the feed, which will give the fire mouth time to absorb its excess of live coal.

XI—DRAWING THE KILN

THE drawing of the kiln is the time of great excitement for ceramists. The fever which has taken hold of them during the preparation of art pieces grows with the progress of the work to reach its climax during the drawing which is the best lesson for future work as well as a succession of childish joys and disappointments. When the firing is finished the kiln is left to cool off during four days. The fourth day the stoppers of the three spyholes are withdrawn, also the stopper A for circulation of air. (Fig. 50, p. 228, Feb. 1904). The covers of the fire mouths are loosened and lifted; the chimney damper alone is kept closed to avoid a draft which might affect the pieces. The fifth day the doors are loosened and the sand between them gathered. This sand will be screened for future use.



Fig. 92

I generally take the pieces out of the kiln eight days after firing. As each piece is taken out, the placing material is put in order. Broken saggars are temporarily tied with twine (Fig. 69), so that their pieces will not be lost and a few days later this material is thoroughly overhauled. It is cleaned with an instrument called a dressing iron (Fig. 92), the three sharper angles and the angular end of which allow one to remove the vitrified scoriae which may adhere to the saggars.

Most of the pieces of placing material are broken during the firing, but a large part can be used again, as for instance when in saggars, the cracks extend only from the heel to the center, and when, in rings, the cracks are distant from each other. Bats broken in two can be used again, but when broken in three, they should be thrown away.

Whatever care has been taken of the casting of bats, many get out of shape and they should be made true so that the porcelains will always rest on a flat surface. The grinding of a bat is the operation which has for object to remove all inequalities and hollows. To do this, two bats are rubbed against each other, while the two faces in contact are from time to time sprinkled with grès sand.

Although the white glaze remains where it has been placed, colored glazes which are more fusible, are apt to constantly overflow. To overcome this defect, small columns are used for supports, as I have explained in the article on placing. After firing, these columns are stuck to the piece, the glaze having flowed over, and they must be detached. If they have been strongly washed with the infusible wash, a sharp blow with a wooden hammer will be sufficient to detach them, and nothing remains to do but to wear and polish the foot of the piece by rubbing it on a steel disc sprinkled with wet grès powder; or it will be easy to find a wheel to do this work, the faience makers using the same instrument.* As I have no

*Carborundum wheels made specially for pottery work are sold in this country. Care should be taken to buy the proper size of the carborundum grain.—(Ed.)

power, I polish my pieces on a wheel resting on a wooden support. This operation requires some patience.

I have said elsewhere that the pieces of placing material were violently cracked and broken at each firing. This causes pieces of fire bricks, called *grains*, to get stuck to the fused glaze. These grains making flaws in the ware must be removed with a carborundum wheel. It is useless to speak of this work which is the same for porcelain as for faience.

Sometimes cracks occur on glazed pieces. If the crack is not too deep, it is possible to fill it. For this filling, pulverized biscuit of hard porcelain is mixed with gum arabic. This paste is worked with an ivory or wood spatula and forced into the crack. After it has dried it is filled again, then it is covered with gummed glaze and refired in the same conditions as before. With colored glazes, cracks disappear.

Unglazed biscuit never being refired, the cracks must be filled in the same manner, but without refiring. The biscuit flour is then mixed not with gum, but with silicate of soda.

Porcelain has the great advantage of standing 3 or 4 firings without much risk, and even of acquiring more brilliancy at each refiring. It is then easy to repair pieces on which have appeared grains, thinness of glaze, cracks, blisters and even raising of paste, as is often the case for flammé reds of copper when their firing has not been done properly. I have seen Sèvres pieces refired three times. Chaplet has shown me some fine flammé reds obtained at the sixth firing, and I have in my collection ceramics which have stood four firings.

As a rule grès does not stand a refiring well. All the trials I have made with this material have been disappointing. However, when the grès piece has been fired without glaze the first time, in biscuit, one may, with a chance of success, refire it with glaze, but in both cases the firing should be oxidising. It is on a second firing, the first of which is made in biscuit, that crystalline glazes on grès are obtained. Grès will not stand a second reducing fire. On the contrary porcelain behaves well in many refirings with both atmospheres. But one point must be borne in mind. In order that the refired piece may change its appearance, it must reach a higher temperature than it had in the first firing; its modification by a new pyrochemical combination is possible only on that condition. If it has been fired at the bottom of the kiln it must be refired on top (the hottest part), or if it has been fired on top, it must be refired with a new coat of glaze. In this case it is the new glaze which changes the appearance of the vase.

Pieces decorated with mat or bright glazes can be modified, but those which have been decorated with *pâtes sur pâtes* will keep forever the effect acquired in the first firing. So the *body* colored yellow by uranium, which has turned black on first firing through lack of oxygen, will never again become yellow; its combination in black is permanent; but, the cupric *glaze* which has turned green through lack of reduction, will become red on its second passage through a reducing fire.

It is evident that when a piece is refired, one must give it supports and columns which have been fired, as there will be no more shrinkage.

After the firing chamber is emptied, the baking chamber is opened. There pieces have been placed in saggars without lute and without supports or bats. The temperature is comparatively low, but this baking is sufficient to give to pieces the solidity which makes their handling easy, while it increases the porosity necessary for a good glazing. All the placing material must pass through the baking chamber before being fired. It is easy to understand that a raw sagger could not stand any load, and that being somewhat larger than the fired one, it could not be placed on top of it.

BLUE PRINTS OF GRASSES AND FLOWERS

[By MARY EVANS FRANCIS in "Good Housekeeping"]

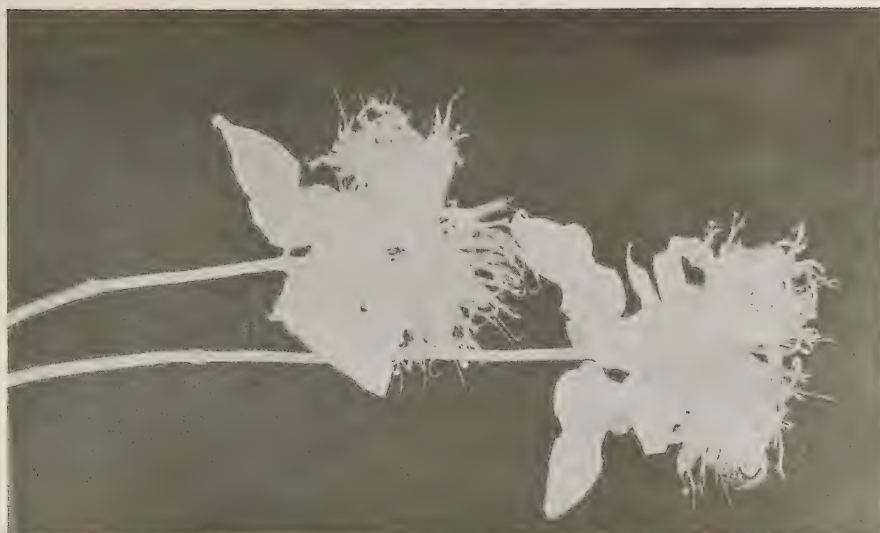
THESE prints are easily made wherever sunlight and water are abundant. Both paper and printing frames may be prepared at home, as the blue paper is well known to everyone who uses a camera. Prints of grass must be at least a foot long and should be wide enough to show the plant without cramping leaf or stem. For paper there is nothing better than heavy white wrapping paper, purchased in large sheets, and cut into strips of suitable width. To insure clear prints it is better to use it freshly prepared, and, as the chemical solution is easily applied, it is slight trouble to finish up a few sheets at a time. The chemicals used are sixty grains citrate of iron and ammonia, forty grains red prussiate of potash. Each should be dissolved in one-half ounce of water, but the two solutions must be kept separate until a few moments before applying them to the paper. Then pour the two solutions together, and in a dimly lighted room lay the strips of paper on the floor and wash the mixture thinly and evenly over them with a camel's hair brush. The wet strips should be hung in a dark closet and left until thoroughly dry, when they may be cut into shorter pieces and laid away where they will be sheltered from light and moisture.

The printing frame is of exceedingly simple construction. For a foundation, which must, of course, be slightly larger than the size of the print desired, a thin wooden board, such as may be bought at any picture framer's, is used. This should be covered smoothly with a pad of three layers of flannel, to insure an even pressure on all parts of the plant. When the grass is gathered and ready for printing, the prepared paper is laid, face up, on this frame and the grass placed carefully upon it, letting stem and leaf and head lie naturally and gracefully so that there will be no appearance of stiffness in the finished print. Directly upon the grass place a sheet of ordinary window glass, the size of the frame, and clamp it tightly to the foundation board, using spring acting clothespins. It will be found advantageous for the collector to prepare several frames, so that a number of prints may be made at the same time.

Preparations for printing must not be made in a strong light, but as soon as the glass is on the frame the whole should be placed in the direct sunlight. The time of printing varies, though ten to twenty minutes is usually sufficient to produce a clear white print upon a background of dull blue. Longer printing shades the white impression made by the grass, and faintly outlines the delicate veining. After exposure the print is washed for twenty minutes, either in running water or in several changes of water. During this process it must be kept face down, but on being taken out it is placed face up again in the sunlight to dry.



DESIGN FOR BELT BUCKLE



Horse-Mint or Balm



Pink



Clethra or Sweet Pepperbush or Alder

BLUE PRINTS OF FLOWERS—LETA HORLOCKER



WISTERIA—EDNA GAMBLE



NARCISSUS

Carrie E. Williams

AFTER sketching in the design commence by laying in the background at the top, using Banding Blue, Shading Green and a little Black, blending into Ashes of roses, Lavender glaze and to Lemon Yellow near the flowers. Paint the flowers with Lemon Yellow, Copenhagen Grey and Violet, being careful to bring out the little cup in center which is the characteristic of the flower. For leaves use Baby Blue, Yellow green, Shading Green and a little Black. Continue the background with Yellow Green, Violet, Shading Green, Brown Green and Purple Black. Dust with the same colors used in background, carrying some of the color over the shadow flowers. Use same colors for strengthening in second painting.

ANCIENT VASES

DURING the excavation of the foundations of Emperor Domitian's equestrian statue, five vases in a perfect state of preservation, were found under a huge stone. The largest, of red terra cotta exquisitely fluted, was lying on its side in the center. The others, of which one bears the double spirals that are characteristic of the eighth century before Christ, were standing upright close to the western side with the handles pointing to the wall.

This particular position leads archaeologists to think that they were placed there by the Pontifex Maximus, who, at a religious ceremony, would stand facing the east, and would

naturally place the vases at the side at the opening nearest to himself.

In the large terra cotta vase a piece of quartz was found, on which some natural gold apparently had been soldered.

Though this discovery is of great interest as giving actual evidence of the inauguration of a monument during the first century of the empire, Signor Boni, the director of the excavations, considers that it has a much deeper significance. The vases are identical in shape, color, and material with those he found in the tombs of the time of Romulus in the Forum.

This similarity at so great a distance of time he considers as proof of the continuance through the centuries of the religious ritual which had its inception at the foundation of Rome.—*Chicago Inter-Ocean*.

The Springfield Ceramic Club held their May meeting with Mrs. Austin H. Pease, devoting the afternoon to a study of old china—the members bringing pieces which were used to illustrate the topic of the afternoon. Miss Effie Shaw, Chairman of the Topic Committee, gave a most interesting talk on "China Collecting in America," and showed several pieces from her own collection, which includes several exceedingly rare pieces. Mrs. A. E. H. Pillsbury had a paper on "Old Blue" which was most instructive. This was the last regular meeting until fall. The annual tea of the club will be held in June.



WISTERIA DESIGN FOR PITCHER

Russell Goodwin

Wisteria, Yellow Brown Lustre; leaves and outlines, Gold; design in background in varying tones of soft Grey.



PUNCH BOWL IN GRAPES—JEANNE M. STEWART

IN this design the purple, red and white grapes are combined. The red bunch in central cluster is painted in Pompadour, Ruby Purple, Yellow Brown and Banding Blue. A mixture of Pompadour, Ruby Purple, Banding Blue and a little Brunswick Black is used in grapes in deepest shadow and in the very darkest tones in others. In the second painting the Banding Blue and Black should be omitted.

The bunch under the leaves to the left of central group should be laid in in a mixture of Banding Blue, Ruby Purple and Brunswick Black; a very thin wash of Banding Blue being drawn over the lightest tones to represent the "bloom." In painting grapes it is extremely important to keep them clear and transparent with decided light and shade. Lemon Yellow, Yellow Green, Brown Green, Pompadour and Shading Green

are used in the white bunch to the extreme left; over these colors delicate grey shadows are thrown in second or third firings.

The usual greens may be used in the leaves with exception of the central prominent leaf which should be painted in the yellow and brown tones. While the lightest wash of Yellow Brown is still open, the darker tones of Pompadour and Chestnut Brown may be worked in, giving a soft but crinkled

effect to the leaf. Brown green is also used in shading and a bright touch of Egg Yellow and Yellow Red is effectual. The background is grey in general effect, in which Stewart's Grey is used, shading to Grey and Shading Green. Or, the greens alone may be used, shading from Ivory Yellow to Yellow Green and Shading Green, with Shading Green and Brown Green at the base which should be very dark, and dusted in last painting.

TEA SET—FLORENCE E. SEGSWORTH

To be executed in green and gold.





TILE—ROCKWOOD MOULTON

Tint tile with yellow ochre to which has been added a touch of black and pompadour red, then fire. For the second fire carry out the design in royal or moss green with a touch of black; the eight small spaces in corners and around center to be washed in with pompadour to which has been added a touch of black.

KOREAN KERAMICS

Randolph I. Geare

THE Land of Morning Calm, as Koreans often call their native country, was for many centuries noted for the high class of its art productions. Persia and Arabia probably contributed to its celebrity in this direction, and doubtless those countries derived in turn inspiration from the artists of the little kingdom. Indeed the art-workers of Persia and Arabia are said to bear unmistakable signs of Korean originality and skill. At the time when Korea ceased to be called "Korai"—a little more than five hundred years ago—the potter's art still flourished there. But later, when "Korai" had been changed to "Cho-sen," and the people of the new capital, Seoul, had become embroiled in

Jouy and others. These threw a new light on the ancient ceramic industry of Korea, and also furnished valuable information regarding the kinds of pottery that have been made there in modern times.

It is true that the pottery manufactured even at the present day in Korea has certain points of resemblance in common with her products of bygone centuries; and yet it seems proper, at any rate for the purpose of the student, to separate the subject of Korean ceramics into two divisions: the one, dealing with the ancient ware; the other, embracing the pottery made since the Japanese invasion.

Unfortunately the art has deteriorated, and while the older forms may still serve as the basis of the modern products, the latter are not to be compared with the fine specimens obtained from ancient Korean tombs, or with still more beautiful pieces which were doubtless regarded as too choice to be entombed, and were fortunately preserved for the delight of future generations.

Korea has been described as one vast graveyard, with



KOREAN MORTUARY POTTERY

a bitter war with the inhabitants of the old capital, Song-do, the manufacture of pottery declined; and when, towards the end of the sixteenth century (at the close of the Japanese invasion of Korea, 1592-1597) whole colonies of potters and porcelain workers were taken to the victors' home, Korean art ceased to exist in Korea, save as a mere remnant of its former excellence. By slow degrees, however, the manufacture of pottery and porcelain was renewed, but the choicest Korean skill had been transplanted to Japan.

Comparatively little is known of the subsequent products of Korea's factories until somewhat over a quarter of a century ago, when the little kingdom was released from her long period of vassalage to Japan, and was at last recognized as an independent and sovereign nation.

A few years later, in 1882, largely through the energies of Commodore Shufeldt, Korea opened her ports to the United States of America, and in the following year a large number of Korean pottery objects, now on exhibition in the National Museum at Washington, were collected by the late Mr. P. L.

burial mounds and monuments of varying age and archaeological interest constituting one of its most prominent landscape features. In some sections of the country cemeteries occupy fully one-fourth as much space as that used for agricultural purposes. Isolated graves of persons of special prominence are also not uncommon, and these are generally surrounded by groves of evergreens, arranged in the shape of a horse-shoe, with the mound, from four to five feet high, in the center. Here in these groves have lain for centuries numerous examples of the ancient Korean's best art in pottery. Here from time immemorial they had been placed with the bodies, in the belief that the spirits of the departed would have need of them. Other articles were buried with the pottery, such as gilded rings of copper, bronze horse-trappings, and objects of stone, including arrowheads made of slate, and daggers of slate or shale with the handle and blade in one piece.

Much of the early pottery was unglazed, while some was slightly glazed (*vernis*) earthenware of archaic shape. The pieces were either modeled by hand, patted into shape by the



KOREAN POTTERY AFTER KORIN PERIOD

use of an instrument for that purpose, or formed by the potter's wheel.

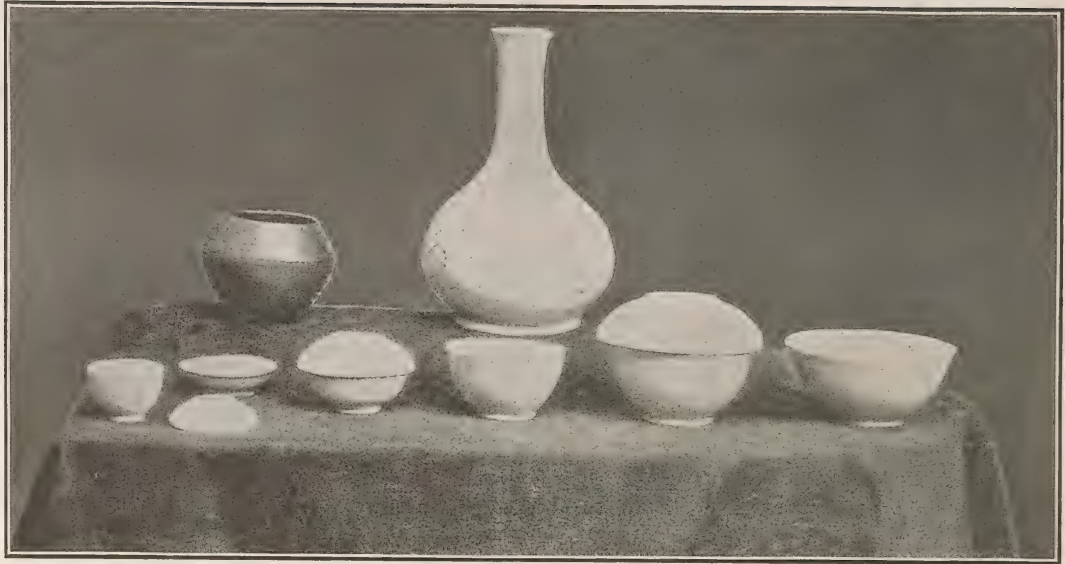
And here it may be remarked that Korea was the birth-place of the potter's wheel, which, as described by Mr. Jouy, consists of a circular table from two to three feet in diameter and four to six inches thick, made of heavy wood, so as to aid in giving impetus to it when revolving. In general appearance it is not very unlike a modeler's table. This arrangement is sunken into a depression in the ground, and revolves easily by means of small wheels working on a track underneath, the table being pivoted in the center. The wheel is operated directly by the foot, without the aid of a treadle of any kind. The potter sits, squatting in front of the wheel, his bench or seat on a level with it, and space being left between his seat and the wheel to facilitate his movements. With his left foot underneath him, he extends his right foot and strikes the side of the wheel with the bare sole of the foot, causing it to revolve.

The existence of any special principles of decoration or of symbols peculiar to Korean art has not yet been fully worked out. There are, however, certain art-*motifs* which often occur on Korean wares. Chief among them is the wave-pattern, which resembles the effect produced by overlapping the ends of feathers. The autumn leaf, floating on the stream, and the half-submerged flower also convey expressive sentiments in Korean art. Arabesque lines that break up the general decoration by means of flat fillets or curved flutings, too, are prominent forms of decoration. Such lines are composed of fruit or flowers, especially the peony. The chrysanthemum design, too, is Korean, and so is the shark's tooth, which is used chiefly on vases where the sphere-shaped surface requires a broad base and sharp slope to a point.

A close examination of ancient Korean bowls, vases, trenchers, etc., discloses very graceful forms and chaste decorations, including the Swastika, or Buddhist cross, the dotted diamond, the wave pattern, etc.

The collection of pottery objects already alluded to as having been obtained from Korean graves, may be taken as typical of the ancient productions of the country. There is a stone-ware dish made of dark grey paste and shaped like a shallow saucer, with a low foot; a wine bottle of light yellowish, granular paste, with an opalescent coating showing yellow spots and dark brown pits, and another one of heavy terra cotta ware, covered with vitreous cracked enamel of a beautiful greenish-grey tint. Near the top of the body, which is jug-shaped, there is a short spout. This bottle is an obsolete form of about the twelfth century. An illustration of it and the other pieces described is shown in the second picture. Such specimens are of equal value with real porcelain, and are of special interest in that they hint at the origin of the celebrated Japanese Satsuma ware. A specimen of ancient earthenware is seen in the wine cup and stand at the extreme left of the same illustration. These pieces are rudely glazed. The cup is shaped to represent a lotus. There are also several bowls of hard, opaque paste, covered with a thick, vitreous, green crackled glaze. The one on the extreme right is of fine, white, hard-paste porcelain, and is ornamented with the wave or cloud pattern on the inside. This is produced by scraping away the paste, the indentations being filled in with a thicker layer of glaze. This ware, which came from the old potteries at Song-do, is exceedingly rare.

The third picture shows some modern pieces of pottery, such as a globular bowl (Jil-tang-quan) of dark red stoneware, glazed on the side which was subjected to the greater heat. Next to it is a wine bottle of heavy glazed porcelain (Sul-biung), ornamented with the dragon design in blue, and in this connection it is important to note that the Korean potters were unable to impart any color but blue to their white ware until the revival of color decoration—some two or three decades ago. The objects in the lower line of this picture make up what might be termed a Korean dinner service, including saucers



KOREAN POTTERY

and bowls for holding fish, vegetables, etc., and bowls for rice, stew and water. They are all of a heavy porcelain, covered with a patchy glaze of greenish hue.

The pottery in common use in Korea at the present time may be briefly described as consisting of three kinds. The finest is of white, pale buff, or bluish porcelain, sometimes decorated in blue and with a high glaze. This consists of dishes, bowls and bottles for table use, and also wash-basins.

The second quality is a pale-yellow ware, glazed, and chiefly made up as bowls, undecorated, and used by the middle class.

The third kind, which is used by the poorer classes, is made of dark brown or reddish earth, glazed inside and outside. It has little or no decoration except a wavy line produced by wiping off the glaze, which permits the lighter under-surface to show through.



MODERN KOREAN POTTERY

BRACELET SYMBOLIZING BRITISH FEDERATION

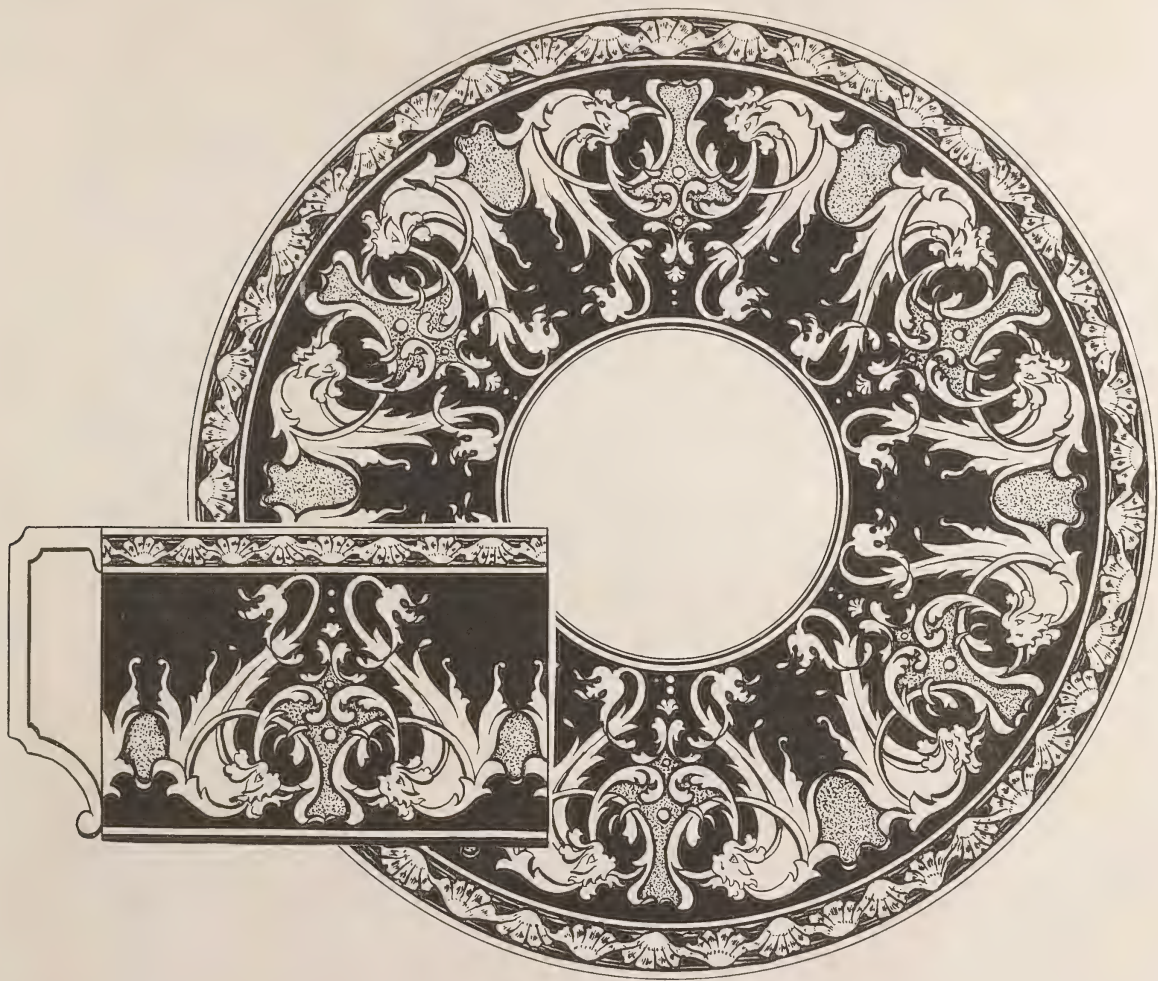
In their search for novelties, enterprising jewelers have not hesitated to take their models from the animal and the bird kingdoms, to say nothing of bending their energies to very realistic reproductions of tiny reptiles, beetles, butterflies, etc., in glittering gold and gleaming jewels. That these specimens of the jeweler's skill have any claim to consideration on the ground of artistic merit few would be willing to admit, but there is a demand for grotesque; eccentric ornaments and gem studded birds, dogs, horses, rabbits, bugs and reptiles are seen in the jewelers' shops side by side with the most exquisite examples of l'art nouveau or reproductions of designs that have stood the test of centuries.

Animal jewelry in simple and elaborate guise receives particular attention in England and the latest ornament of this character is the gold bracelet called the Empire, the pendants attached to the circle of golden links are designed as

symbols of the British federation, with a portrait of King Edward VII in the center. The lion stands for Great Britain; kangaroo, Australia; sheep, New Zealand; beaver, Canada; elephant, India; ostrich, South Africa.



The Florida Indians molded their pottery on gourds and covered them with baskets of reeds to support them until baked. The aboriginal potters mixed pulverized stone, shells, or other mineral substance with their clay to prevent cracking. Some of the Missouri Indians used a black clay which was so tough that they could hang their vessels over the fire as the white man did his iron pot. Some of the better work of the Indians was what is called coil-work, that is, molded over a base of wicker work by coiling the clay round and round until the vessel is complete. This is the nearest approach to a potter's wheel known to have existed among the aborigines.



CONVENTIONAL DOLPHIN DESIGN—MRS. YOUNG

Dark Green background shading into lighter tones in shaded part. Dolphin, shells, etc., Gold with Black or Dark Green markings. Turquoise Blue in dotted spaces. It might also be done with Black Lustre, Silver and Pale Green in dotted spaces.



WILD LILAC—MRS. K. E. CHERRY

FIRST fire for flowers—Sea Green, Deep Blue Green and Violet. These flowers are more of a turquoise blue than the violet coloring as the cultivated lilacs usually are. Leaves are a dark grey green, using Shading Green and Black, Moss Green and Violet

Second fire—Flowers, wash Deep Blue Green in lights, a

thin wash; Violet and Shading Green in shadows, accent with Deep Blue Green and Black.

Leaves, Apple Green in lights, Moss and Black for shadows and dark touches.

Background—Use same coloring as in the flowers and touches of Yellow for the light tinting.

THE CRAFTS

WOOD CARVING AND PYROGRAPHY. LEATHER AND METAL. BASKETRY, ETC.

Under the management of Miss Emily Peacock, 6 Brevoort Place, Brooklyn, N. Y. All inquiries in regard to the various Crafts are to be sent to the above address, but will be answered in the magazine under this head.

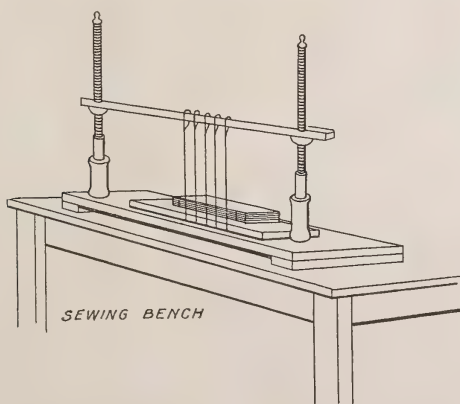


Bound by Helen G. Haskell.

HAND BOOK BINDING

Helen G. Haskell

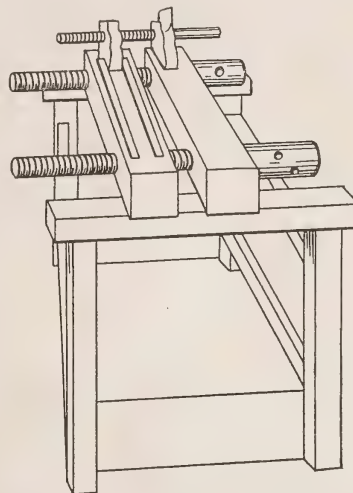
BOOK-binding is a craft which cannot be well learned from a book. It necessitates object teaching, and that over and over again; line upon line; precept upon precept. The more than forty processes follow each other in such logical sequence that the interest and fascination in the work is kept up from beginning to end. Yet it is difficult to remember just when one does each process and uses the different tools, and laughable and sometimes tragic blunders are made. But an experienced teacher usually has some way out of the difficulty and the pupil goes on with added cheer, finding that each finished book means steady progress.



People often think that sewing is the first thing to do in binding a book. But first they learn the rather long and often tedious process of taking the book apart, cleaning off the glue, mending the leaves, re-folding, registering and cutting the head by hand before the book is "knocked up" at the head and

tail and put in press for twenty-four hours. While waiting for the pressing the blank end papers are cut from strong, hand made paper folded with proper hinges and tipped with waste paper which will keep the leaves clean while the book is being bound. The conventional number of bands on the back of a book is five. The book is taken from the press and placed with its back up in a small finishing press and these five bands marked on it at equal distances, the tail being left a little longer than the other spaces, and the kettle stitches sawed half an inch from either end.

The sewing bench is set up with five cords spaced to correspond with the markings on the book and at last the book is ready to be sewed. Each section is sewed with silk around each of the five cords and fastened at the end with the "kettle stitch." A book sewed in this way cannot come apart so long as silk and paper last and the cords against which it is sewed become a part of the decoration of the book in the bands



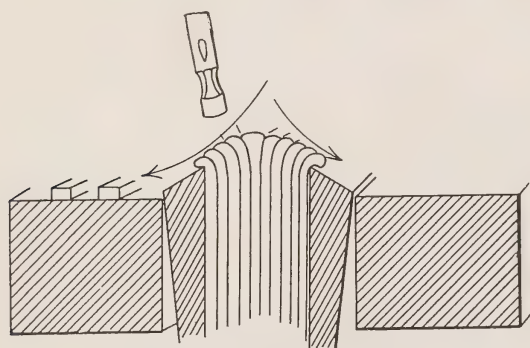
LYING PRESS AND PLOW

across the back over which the leather is stretched in covering. When the book is taken out of the sewing bench it should be collated so as to be sure that each leaf is sewed into its proper place.

The book is now beaten to make it solid, the cords cut about three inches long and frayed out very fine: and it is ready for backing. This is perhaps the most important process of the work, for, on the evenness of the turned joints and the rounding hang the whole style of the book. It is put into a small press and the back covered with a thin glue to keep the hammer from tearing the leaves when rounding. This glue is well rubbed in and left to dry, the backing boards are placed on each side, the depth of the joint below the back and the back rounded from the centre and polished. Much practice and skill is necessary to make the back firm and round. The English use a flatter back than the French do, but the process is the same.

The covers receive attention next. They are cut from millboard a little larger than the book and three pieces of paper pasted on them, the side having two pieces going next to the

book to counteract the pull of the leather when covered. When dry these boards are cut to the size of the book with the plow in the lying press. This plowing of the board leaves a polished edge all around. Two rows of holes are punched in each board to correspond to the bands on the book and through these holes are laced and pounded the cords making the book and its covers one. With the heavy English cord used it is almost impossible for the covers to ever come off. With tins on either side of the covers the book is pressed and takes its permanent shape. The glue is scraped off the back with flour paste and a wooden stick and then the book is ready for its most difficult process—the cutting of head, tail and fore-edge. These are cut in the lying press with the plow. The head and tail are cut a little smaller than the boards and without much difficulty. For the fore-edge trindles are put in to straighten the back for the time, boards are placed on either side of the book and then it is put into the press so that everything is even before it can be cut. If the book slips a hair's breadth the fore-edge will be cut unevenly. Now the book goes to the gilder to have the edges gilded. Valuable books are cut by hand all the way around and gilded before being sewed and this is called rough gilt. The head bands either single or double are woven of silk over parchment firmly into either end and set there with glue and paper. The corners of the covers next these head bands are cut off, the five cords lacing the covers on are cleaned and re-set, the bands on the back nipped up well and the book is forwarded and ready to be covered with leather and finished.



BACKING A BOOK

For this kind of binding only the best Levant Moroccos and pig-skin are used. First books are bound in leather back and corners, with paper sides. Books to be decorated are bound in full leather. The leather is cut the size of the book with a margin all around. This margin and the middle of the back are pared thin with a broad knife. The covering of books is almost a craft by itself. It takes much skill to make sharp even bands on the back, to model the corners and to make the hoods over the headbands. The leather is wet, thoroughly pasted and then put on the book. Band nippers are used to make the leather stretch over the bands and much patient rubbing with band sticks is done to polish the back. The book is put away to dry until the next day when it is carefully opened up so that the covers will open back and touch. When the leather has dried open, the corners are cut and finished, the turnover inside cut even all around and paper filled in. The leather on the covers is now crushed in the press and then the book is ready for decorating, the goal towards which the binder looks most eagerly all through his work.

Simple and conventional designs should be used in "finishing" books. Easel pictures or flower painting in

mosaic and gold are in the worst possible taste, even though the workmanship may be marvelous. Few tools and those combined according to the best rules of design, are good principles on which to work. There are three kinds of decoration "Blind tooling," "Gold tooling," and "Mosaic." For all of these the design is first made on strong paper; the tools are heated and the first impression made on the leather by pressing them through the paper. These impressions are deepened by wetting the leather and pressing the warm tools in a second time. For "blind tooling" the polish is given by going over the design a third time with the hot tools oiled. For "gold tooling" the leather is prepared with vinegar, glaire, palm oil and gold leaf, the hot tools are pressed into their places again and the loose gold is taken off with a rubber. In the "mosaic" decoration parts of the design are cut from thin, contrasting leathers, fixed into their places on the book and tooled over with gold. There is no limit to the time one may put on a well loved book and the fascination and pleasure in the work grows on one as the years go by. When decorated the leather is varnished, the end papers pasted back, the book opened leaf by leaf and then pressed to make sure that it will open and close properly.

It takes a long time to learn how to bind books worthy of decoration, but this only proves the dignity and worth of the craft. Patience, the love of books and, incidentally, a sense of humor are necessary virtues in a good binder.

The presses and tools for a binding plant can be purchased for about \$75.00, and then one can add indefinitely to one's finishing tools as taste and purse may dictate. Instruction in binding is usually given in private studios, but there are two schools which have made it one of their departments and where tuition is practically nominal: The Art School, Norwich, Conn., and the School of Industrial Arts, Trenton, N. J.

T. J. Cobden-Sanderson, of London, is the best binder of the day and several of his pupils are teaching in this country. It is only eight years since women took up this craft, but the work of these years has proved that it is a work quite as suitable for them as for men, and several of them stand on equal footing in the book-binding world.

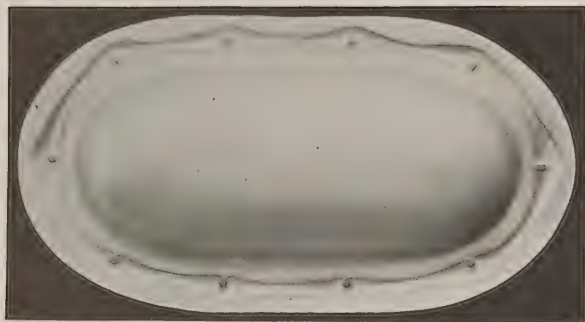


TALKS, TEA AND THINGS

A SERIES of talks and an interesting exhibition of hand-work in various branches took place at the Ridge Club House, Bay Ridge, N. Y., from May 3d to 6th.

On May 3d Miss Averill told about Japanese flower arrangement and showed a charming arrangement of a flowering shrub. May 4th, Mrs. E. D. Sawyer read a paper on Household Decoration. May 5th, Mrs. Victor Shinn exhibited her hand loom, assisted by Mrs. Anna Emberg who showed a wonderful collection of hand woven textiles. May 6th, Miss Mary White told of baskets from many lands, illustrating her talk with interesting and rare specimens loaned by Mr. Frank Covert.

As an outcome of the talks and exhibition an interest has been awakened in Bay Ridge and piazza classes formed to study certain of the crafts through the summer months. The exhibition showed some interesting work from various artists and craft workers:—Baskets and bead work by Miss Mary White; designs for table covers and plate doilies for summer cottages by Mrs. E. D. Sawyer; burnt wood by Miss Lulu Githens; metal work and jewelry by Miss Emily Peacock; childrens' book plates by Gardner C. Teall; Portrait sketches of children by Chas. Buchanan; dyed stuffs and bead weaving on cloth by Miss Sara Pierce White and hand woven Pilgrim rugs from Pittsfield, Mass.



SILVER SPOON DISH

THE low silver spoon dish is made from a piece of silver 5 inches x 9½ inches, 20 gauge. After cutting the oval shape very carefully and correctly, make a line just one inch from the outside edge, this line is the guide from where the bowl part is to be beaten. Make a pattern from a 3 or 4 inch block of wood (see November number, page 165) into profile Fig. 1.

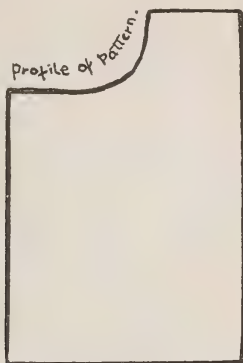


Fig 1.

Anneal the silver and begin to hammer with a good sized hammer (Fig. 2), holding the silver firmly against the block and slowly moving it all the time. Always anneal the silver when it begins to feel hard and proceed with the hammering until the bowl part is well shaped and deep enough. If the rim is not perfectly flat make it so by hammering it with a rawhide hammer on the anvil.



Fig 2.

Put the design (Fig. 3) on the under side of the rim with a steel point. Fill the bowl with pitch and turn this on the pitch ball.

Outline all the lines in the design with a tracer and then repoussé with suitable tools. Take the dish off the cement or pitch and put it back on the other side, then work down the background with a flat planisher next to the design and a round one afterwards. After this is done satisfactorily, soften down with emery cloth of different grades, beginning with medium, and finishing with very fine. Solder on the bottom of the dish four silver balls for feet, this process will be

less difficult if a small cage of wire is made and put on each ball, leaving enough wire from each cage to go round the dish, so that the balls can be fastened securely in place. Polish the dish with pumice and water then use tripoli to finish.

ANSWERS TO INQUIRIES

Mrs. W.—If your ring is to be joined in the back a bevelled joint is better and stronger than a straight one. Bevel carefully under one edge, and over the other, and bring them together so that there is the same thickness all round the ring.

L. M.—There are many kinds of silver solder, if you are doing a large piece of work, I should advise you to get three kinds, very hard, hard, and soft. Begin with the hardest, so that when you use the next degree the first will not be liable to melt. Clean, freshly ground borax is about the most reliable of the fluxes.

U. Johnson.—You can get French plate glass, bevelled and cut any shape and size from the manufacturer, E. P. Birnbaum, 40 Dey Street, New York.

Mrs. R. T.—We will give an article on stenciling very soon, and are sure that you will get some inspiration for your portieres from it.

R. O.—A copper box is quite a difficult thing to make well. Each part must be quite true, and the edges very well scraped before you solder. Soft solder can be used for a purpose of this kind. Why couldn't you lap each seam, and rivet them with copper rivets. If you do not want to make the hinges, buy brass ones, have them heavily copper plated and rivet these on in the same way.

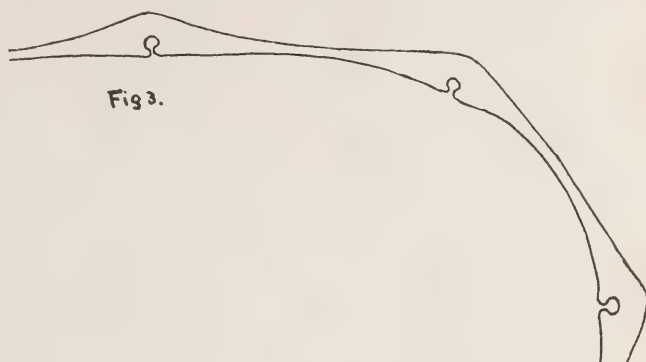


Fig 3.

Raffia.—The slender roots of the tree Yucca are sometimes used for the red figures in the baskets of the Panamint Indians of Tuvo County, Cal. These Indians also use extensively the small branches of the three leaf Sumac, in the manufacture of their baskets. For warp the peeled branches are used. For weft and for the sewing material of coiled baskets the branch is usually split into three strips and the bark and the brittle tissue next the pith removed leaving a flat tough strand.



CANDLESTICK

THIS delightfully simple candlestick is an expression of modern German art and was kindly lent to us for reproduction by Mr. W. T. Bush of Brooklyn. It is made of thin sheet-iron in three pieces, one piece for the bottom, one for the socket for the candle and one for the handle, a part of this also holds the socket. Four iron balls riveted to the bottom part of the candlestick, supply the feet.

ANSWERS TO CORRESPONDENTS.

This column is only for subscribers whose names appear upon our list. Please do not send stamped envelopes for reply. The editors can answer questions only in this column.

All questions to be answered in the Magazine must be received before the 10th day of the month preceding issue.

A. A. L.—We never have repaired any of the English china you mention, we have always found Sartorius cement satisfactory for what work we have done, but if your ware, as you say, absorbs it and will not stick together we would advise letting it absorb as much as it will and then use a very little Aufsetzweis in tubes to help stick the pieces together and until it can be tied with your asbestos cord. Flux would not do—it would wear out. Dishes that turn dark in the crack can usually be refired hard enough to make the color disappear. Maroon makes a rich dark red when dusted on.

L. M. C.—In using for decoration a coat of arms in which rich red and green are used, we should suggest placing the coat of arms on the rim with gold edge and lines or bands of gold or the red or green stopping either side of shield. We doubt if you could have a transfer made in this country, you might write to Palm & Fechteler whose ad will be found in the advertising columns. You will probably have to transfer the outlines with a pencil and fill in with color. Plates well executed in this style should be worth \$3.00 to \$4.00 each, possibly \$5.00.

W. C. C.—The cause of the fine white spots appearing on your painted piece of china is difficult to decide without seeing. It might be that it came from moisture in the kiln or from splatterings of alcohol before firing. Possibly, however, it comes from some imperfection in the glaze of the china, this is the more likely explanation.

D. N. B.—We should judge that the cause of blistering on your bowl was due to too much oil or color in some places. You never can tell when these will blister, some times a thick or oily color will come out all right but usually when the firing is too rapid more blisters appear than when the firing is slower. The strength of the firing would not do it. In America more china is underfired than overfired. We do not think you fired too hard. When once a piece begins to blister, it is impossible to say when it will stop.



WILLIAM ADAMS, AN OLD ENGLISH POTTER

with a history of his family and their productions.

by WILLIAM TURNER, F. S. S.

THIS interesting publication on the well-known Adams productions, especially on the celebrated jasper ware of William Adams, is for sale by the
Keramic Studio Pub. Co.,

SYRACUSE, N. Y.

Price \$9.50
Delivered.

*A review of the book will be found in "Old China" for April 1904.
Send for prospectus*

THE BOOK OF ROSES

It contains over forty pages of designs and studies, many of which have appeared in back numbers of *Keramic Studio* now out of print, and the volume is also enriched by nine color studies by the following artists: Marshall Fry, F. B. Aulich, Sara Wood-Safford, E. Louise Jenkins, Anna B. Leonard, Rhoda Holmes Nicholls and Teana McLennan Hinman.

Among the other contributors to the book we have K. E. Cherry, Mary Alta Morris, Henrietta B. Paist, Hattie V. Young Palmer, Ida C. Failing, Marianna Heath, A. A. Robineau, Sara B. Vilas, M. M. Mason, I. M. Ferris, Nellie Sheldon, F. G. Wilson, Alyce Barber Pflager, Mariam L. Candler, Mary Alley Neal, E. Mason.

The book is designed to meet the requirements of both schools of decoration, the Conventional and Naturalistic, the space devoted to each being about equally divided. Treatments for china painting are published in full and many of the designs are accompanied by treatments for water colors.

The size of page and quality of paper used is the same as *Keramic Studio*, the whole is tastefully bound and will be sent post-paid or express paid on receipt of \$3.00.

Prospectus mailed on application.

KERAMIC STUDIO PUB. CO., Syracuse, N. Y.



NASTURTIUMS—HENRIETTA BARCLAY PAIST

JUNE 1904
 SUPPLEMENT TO
 KERAMIC STUDIO

PHOTO-CHROMOTYPE ENG. CO., PHILA.

COPYRIGHT, 1903
 KERAMIC STUDIO PUB. CO.
 SYRACUSE, N. Y.

KEEP THE FIRE ALIVE.

KERAMIC STUDIO

CONTRIBUTORS

MRS. K. E. CHERRY ♪ ♪ ♪ ♪ ♪
MR. TAXILE DOAT ♪ ♪ ♪ ♪ ♪
MR. HUGO FROEHLICH ♪ ♪ ♪ ♪ ♪
MRS. HENRIETTA BARCLAY PAIST ♪
MISS EMILY F. PEACOCK ♪ ♪ ♪ ♪ ♪
MISS LOUISE M. SMITH ♪ ♪ ♪ ♪ ♪
MRS. SARA WOOD SAFFORD ♪ ♪ ♪
MRS. ELIZABETH SAUGSTAD ♪ ♪ ♪
MRS. BELLE BARNETT VESEY ♪ ♪ ♪

JULY MCMIV Price 35c. Yearly Subscription \$3.50

A MONTHLY MAGAZINE FOR THE POTTER AND DECORATOR.

[The entire contents of this Magazine are covered by the general copyright, and the articles must not be reprinted without special permission.]

CONTENTS FOR JULY 1904

	PAGE
Editorial	49
National League	49
Principles of Design—Color (see supplement)	49-50
Roses	51-52
Grand Feu Ceramics—XII Colored Pastes	53-55
Trumpet Flower	56
Class in Ceramic Design: M. Fry, Instructor	57-63
Y. W. C. A. of New York Exhibition Notes	64
Pratt Institute Exhibition	64-65
Violets	66
The Crafts—Furniture for Camp and Cottage	67-69
Making a Silver Tea Strainer	69-70
Answers to Inquiries	70
Bowl and Plate	71
Answers to Correspondents	71
Cherries	72

Some Leading Agencies of Ceramic Studio

We take pleasure in mentioning a few of the leading agencies for the sale of the KERAMIC STUDIO, where, also, subscriptions may be placed:

Beaver Falls, Pa.—William T. Reeder, 1208 7th Ave.
 Boston, Mass.—Miss E. E. Page, 286 Boylston St.; Smith & McCance, Old Corner Book Store.
 Brooklyn—A. D. Mathews & Sons, Fulton Street.
 Buffalo—Mrs. Filkins, 609 Main Street.
 Chicago—A. C. McClurg & Co., Brentano's; Burley & Co.;
 Cincinnati—Miss M. Owen, 245 Elm Street; A. B. Closson, 4th Street near Race; Traxel & Mass, 4th Street, near Elm.
 Cleveland, Ohio—Vinson & Korner, 150 Euclid Ave.
 Columbus, Ohio—Lee Roessler, 116 So. High Street.
 Dayton, Ohio—W. W. Kile & Co.
 Denver, Colo.—E. Meininger, 807 16th Street.
 Detroit, Mich.—L. B. King & Co.
 Hartford, Ct.—E. M. Sill.
 Grand Rapids, Mich.—Miller, Wolfe Co.
 Indianapolis, Ind.—Keramic Supply Co., Lemcke Building.
 Kansas City, Mo.—Emery, Bird, Thayer Co., Geo. B. Peck Co.
 Louisville—Louisville Book Store.

Minneapolis, Minn.—Minn. Art China Co., 607 1st Ave. So.
 New York City—Brentano's, Union Square; M. T. Wynne's, 11 E. 20th St.; The Fry Art Co., 36 W. 24th St.; Wanamaker's; American News Co. J. B. Ketcham, 107 W. 25th Street; M. J. Whaley, 430 5th Ave.
 Newark, N. J.—Keramic Novelty Co.
 Oakland, Cal.—Smith Bros.
 Omaha, Neb.—Megeath Stationery Co.
 Philadelphia—Wanamaker's.
 Pittsburgh, Pa.—Otto Schaffer & Bros.; Kurtz, Langbein & Schwartz; R. S. Davis & Co., 346 Fifth Ave.; John G. Yergan, 36 Fifth Street.
 Reading, Pa.—Rowland's Book Store.
 Saratoga Springs—Robson & Adees.
 San Francisco—Mrs. M. E. Perley, 207 Post Street.
 Sioux City, Ia.—J. K. Prugh, 312 Nebraska Street.
 St. Louis—F. Weber & Co.; A. S. Aloe & Co.
 Syracuse—Wolcott Book Shop; Welch & Hollingsworth; W. Y. Foote; A. L. Varney & Co., 336 S. Salina Street.
 Tacoma, Wash.—Art Exchange, Mrs. Mead.
 Toronto—The Art Metropole.
 Warren, Pa.—Alzora Bashline.
 Washington, D. C.—Woodward & Lothrop.
 The Magazine may also be ordered from any news dealer or book store in this country, who can procure it through the American News Company New York, or its branches.

KERAMIC STUDIO

Vol. VI, No. 3

SYRACUSE NEW YORK

July 1904



We feel particularly proud of the supplement which accompanies this issue of *KERAMIC STUDIO*. It was produced especially to illustrate the article on color by Mr. Hugo Froehlich, and is an unusually good reproduction, although no mechanical process can *exactly* reproduce a painting. To those who are serious students of design, this supplement will be invaluable. At the same time we realise that those of our readers who prefer naturalistic painting to design, will not be able to appreciate the worth of this study and to them we would say that we have ready and in preparation, more good naturalistic studies than we have issued for some time. As an earnest of this we announce for September supplement a fine study of Pansies by E. Louise Jenkins; for October "Dawn," an original figure study, beautiful in color, by Miss Harriette Strafer and in November four dainty panels of little grapes by Sara Wood Safford.



We remind the students of design that the next issue will contain the Class Room criticism on design based on the "Jack-in-the-Pulpit" motif. All who wish to submit designs for criticism on this problem, must send in their work by the fifth of July. Those wishing to submit designs based on the Dandelion for the following Class Room criticism must send them in by the 15th of July. The Narcissus problem which follows must be sent in by the 15th of August.



A recent addition to our study table is a copy of the new edition of the old "standby," Miss Louise McLaughlin's Manual of China Painting, issued by the Robert Clarke Company of Cincinnati, Ohio.



We also have received from the English firm of Longmans, Green & Co., a text book of ceramic calculation which should be of great value to potters, the only other book of this nature with which we are acquainted being the Manual of Ceramic Calculation issued by the American Ceramic Society for its members.



THE first meeting of the new Advisory Board was held in Chicago, Saturday, May 28th. This was as "immediately after election" as possible, the election having taken place in New York City and the Board meeting in Chicago.

Not yet having recourse to the minutes, reports, stationery

etc., some items were left for the June meeting. All efforts of the Board regarding the study course are to be directed along the lines chosen by our predecessors who have given serious thought and untiring labor to its formative period.

An important matter of business was transacted,— the reelection of Miss Mary Chase Perry, as chairman of the committee of education. An enthusiastic vote of thanks was accorded her, for previous work, proving entire satisfaction with her methods and manifesting a desire to continue the best possible course of study for members of the League.

Let us acknowledge our appreciation by taking hold with the undaunted American spirit that wins.

BELLE BARNETT VESEY,
President.

Chicago, June 1, 1904.



PRINCIPLES OF DESIGN—COLOR

Hugo Froehlich

THE color supplement this month shows us some of the sources from which artists draw color inspiration. Various attempts at scientific solutions of good color have been made at different times, and while these have been material aids up to a certain point, yet the emotions trained by experience will always be the first and most infallible judges of fine color. The quantity of color, the intensity or grayness, its tint or shade, its position, its shape, its technique are so many factors in any color arrangement that can be solved by scientific formulas, just as any musical composition or any poem depends on structural formulas. If these formulas or methods can be mastered so completely that they become sub-conscious and allow the emotions to have full sway, we have possible conditions for good work. The emotional judgment and not the method is the criterion, because the method alone in the hands of the tyro, even when it is fully comprehended, results in mechanical work which lacks all fire of inspiration.

When an artist picks up a pebble and finds a color scheme that plays color music to his eye, he never attributes that pleasure to a scientific formula. It may be reduced to such, and thus give an added satisfaction, but the emotional pleasure is first, and is dominant. In painting a grey day, for instance, we feel the charm of the subtle differences of the greys and their technique, but only on analysis do we find that dominant harmony is one of the causes which, as the term indicates, is a bringing of all colors into closer relation or harmony, by making one color dominate all. For instance if the sky is blue, the distance violet, and the foreground green, these may be brought into closer relation by mixing a warm or cool grey, the dominant note of the grey day, with the sky, distance and foreground, thus making an enveloping color. In some early morning effects, a grey greenish yellow dominates, while in some sunsets a red may be the enveloping color.

This method is largely followed by painters both of the past and present. Rembrandt's "Night Watch" seems so bathed in gold that the armor and black velvets seem to give out a subdued golden glow. Van Dyke, Velasquez, Titian, Tintoretto, Veronese, and many others worked in this way. This same method is successfully employed by designers as

well, and always has the effect of bringing harsh colors into harmonious relation.

Interior decorators find it difficult to bring the disagreeable yellow of the wood trimmings of the modern house to any terms with the wall paper, carpet, and furniture, unless they frankly stain it a color that will harmonize with the rest of the scheme, which is usually controlled by some dominating or key color. Custom and conservatism have fastened on us this hideous yellow varnished wood trimming, and only the trained eye refuses to tolerate it. Weathered and fumed oak are protests against this garish yellow finish.

In much of the ceramic work the poor color is due to the use of colors that have not been sufficiently related. It is true, however, that quantity, position, shape and technique have much to do with the success or failure of a color scheme, because if any one color area is too large or too small for the quantities of the others, the balance of the design is destroyed, even though the scheme may be a dominant harmony. So again, if the position is such as to attract undue attention, the balance of the design is destroyed. Or the quantity and position of a color area may be right, but if its shape does not harmonize with the neighboring shapes, it will destroy the balance. Lastly, the technique may be too vigorous or too tame, it may be too brutal or too insipid, and thus throw out of balance the other qualifications.

We must often turn reverently to the past for our instruction, and we find a most magnificent use of color in the paintings and fabrics of the Middle Ages. The simple colors then at the disposal of the painter seemed no hardship, and their canvases are the very essence of fine color. To these treasures, frequent pilgrimages are made by art lovers and painters of the present, who make copies that they may come in direct touch with the method of producing fine color. This not only adds to their stock of knowledge, but stimulates their color sense and gives them the power to express some of that color in their own work. But these treasures are not within the reach of many, and it becomes necessary to go to sources nearer the worker. Even the textiles of the golden period of Sicily, Spain, Florence and Venice are rare, and nothing but bits of rags of this splendid time are left. At handsome prices, these have been collected by art lovers, so that the painter of the present can consult these records in museums and private collections, but may not hope to possess them.

Even Japanese and Chinese prints are scarce and are growing more so every year. These prints are little songs of line, mass and color, that sing their quaintly beautiful melody to the eye, and influence the art standards wherever they go. Unfortunately, however, anything with the Chinese or Japanese stamp upon it is considered by the uninitiated public as standard, and this uncritical attitude has resulted in a flood of most decadent Chinese and Japanese wares, which is sweeping the country, and is to a large extent counter-balancing the good accomplished by the fine things done by these people. Training to see and know, alone can correct this decadence.

Some of the earlier Indian pottery is splendid in its color scheme, and is especially helpful to the art craftsman. The Sikyatki bowl on the supplement page has suffered some in reproduction, but even in this print we see what good color relations are expressed, how fine the structural lines, how splendid the balance of the simple masses.

Old oriental rugs, bronzes, pottery and porcelains are further sources for color suggestions and are within the reach of students.

We find the artist's studio interesting because a trained mind has brought together many art objects and so arranged them that the atmosphere of the atelier is an expression of

the artist's life. It is as much a creation of his mind as his canvases are, and it is as necessary to him as the violin is to the violinist.

One more source of color inspiration that lies at our very doors is in Nature's treasure-house. In autumn she gives us infinite variety in the sedges, grasses, and leaves. At any time of the year, indeed, we can make color demands on her, and find helpful response. Lichens, mosses, pebbles, the bark of trees, the very color of a mud bank all give us color schemes, provided our eyes have been opened to this kind of beauty. Birds, animals and insects, as well as atmospheric conditions and times of day, are further aids.

The increased appreciation of color that comes from a study of these various sources is inestimable, as any attempt to copy them gives us the method and control of material. If we should try by the use of water color to get some particular shade of green found in a Japanese print, we would learn by this effort the number of colors required, the quantity, quality and limitations of each color. Our color chart is a further aid in naming and locating this color, so that its subsequent occurrence in a line design would recall the original color.

Fleeting impressions, such as storm, sea, atmospheric, twilight and moonlight effects are noted by making small, rapid outlines of the scenes, and writing, in the various shapes of sky, ground and water, the name of the color in its abbreviated terms.

These, in a general way, are the sources from which we derive our color knowledge, and this once acquired, we think in its technical terms. This is illustrated in the maple leaf and its color application in the vase opposite, in the Sikyatki bowl and its application in the accompanying stencil, and in the Venetian textile and its application in the decorative landscape. Many artists collect these materials, making careful copies in a sketch-book for future reference. To the ceramic worker, especially to the over-glaze painter, this method must be of the greatest value. All art growth is slow, and the rank and file of ceramists will continue to multiply realistic landscapes and figures, and sprigs of flowers on vases, plates, cups and saucers. Nor is this to be too much lamented, for while we must work toward a better art, the development must come through a gradual change, rather than by a violent revolution. A saucer with a sprinkling of violets that vie with nature in realism is more beautiful to the majority of people than the same saucer without any decoration. This is inevitable, because it is but one step in the evolution of art, just as the overloaded realistic pyrography designs are a similar step. But because people enjoy this kind of art we ought not to close our eyes to the art that has lived for centuries, and will continue to live for many more. Because we enjoy the popular tunes whistled on the street, we must not forget that Beethoven and Wagner produced works that will fill the world with their grandeur long after the popular tune has been forgotten. Realistic flower representations decoratively used and popular tunes will always be with us; they have their legitimate places and are stepping stones upward to something better. Let us, therefore, study that something better,—the really fine thing—and learn to appreciate it, even if we cannot hope to attain it. Let us get at the causes that have made splendid art possible, and try to apply these causes to our violets. The leaders in ceramics are doing this, and are making wonderful strides in bringing china painting up to the dignity of good work. By and by, others will join these leaders, and their art will not be confined to ceramics only, but to the great, real, every day world about us.

This is the art that we should keep in mind; the art that brings beauty in touch with life at every point.



YO G RO
L LL LL
1 1 1
2 2 2



G YO
LL LL
1 1
2 2



RO RV R V R G O
M M LD LD M LL L
1 1 1 1 1 1
2 2 2 2 2 2



RO V R G O
M LD M LL L
1 1 1 1
2 2 2 2



V B G R R YO V
L LD L LL LL HL HL D
1 1 1 1 1 1 1
2 2 2 2 2 2 2



G G R R YO V
L LL LL HL HL D
1 1 1 1 1
2 2 2 2 2

SOME COLOR SCHEMES AND THEIR APPLICATION—HUGO FROELICH



ROSES—SARA WOOD SAFFORD

FOR roses arranged to mass around the top of a vase thus making a border, with stems and leaves falling below, I would suggest that the roses be done in soft cream and white—a background of grey, deep at the top and shading to a light soft tint toward the base. Use Shading Green and Royal Purple (or Violet) in tone at the top applying quite thickly, use same colors in the lighter tints—tint mixture very thinly in brush till you have a pleasing grey green tone.

In a second fire the same colors may be used at the top and Pearl Grey softly blended over the entire lower surface of vase. In a third and fourth fire, flush the *entire* vase with same Pearl Grey. Be careful to keep some of the soft lights upon the roses, but do not forget the harmony of greys.

Use Violet and Yellow for grey shadows in rose petals,—add a touch of Dark Green in deeper shadows, Albert Yellow in

the main hearts, a touch of Yellow Brown in deeper centers. Keep the leaves in grey greens, using the Violet shades with the light as well as darker greens.

For the small roses to be used loosely in decoration, I would suggest that one color tone be held in mind—a soft cream and grey scheme as suggested above. If pink roses are desired, have shades of pink and not a mass of pink, yellow, red and white.

A very pretty scheme in pink could be kept if the lightest roses were the most delicate “blush rose” tint, some of the petals being left creamy white, the second color being a deeper rose; use Rose pure in the center; Rose and Yellow (thin) in outer petals. The third tone, the deepest note, hold with Rose and Ruby in the heart and the same colors thinly applied for lighter petals. Keep leaves in soft grey greens.



ROSES—SARA WOOD SAFFORD

GRAND FEU CERAMICS

XII—GRAND FEU COLORS—Colored Pastes—*Pâtes sur Pâtes**Taxile Doat*

have now reached the most interesting part of the grand feu art, the colors. Whether a painter, a sculptor or an architect, the ceramic artist must also be a chemist. He may produce the finest models of sculpture or the most beautiful decoration, he may fire in the most even and experienced manner, but he will not succeed if he has not at

his service a palette of colors which suits his work. But the palette of the grand feu is not like that of the petit feu; for the latter, one may go to any of the merchants who are numerous in Paris, Berlin, and New York, and secure a rich palette which will compete with the finest tones of oil painting. For the grand feu, each ceramist must mix his own colors or have them experimented on by a chemist who makes a specialty of such work. These chemists are rare and the additional expense of such collaboration is possible only to large manufactories. The researches are costly and are naturally kept secret by the establishments for which they are a source of profit.

The isolated artist, not having any help of this kind, must be his own chemist. If he is fond of research he will certainly succeed, and the whole of his work will gain therefrom harmony and homogeneity.

His work will be simplified by the publications of such men as Brongniart, Ebelman and Salvétat, who in France are authorities.* He will find in these books information which will constitute his starting point and a number of acquired results which he may modify to suit his fancy. He will also be helped by catalogues of chemical products which large firms everywhere offer to the public, wherein the metals, acids and salts constitute a rich mine for varied experiments. These products are offered in a state of the greatest possible purity by reliable industrial firms.

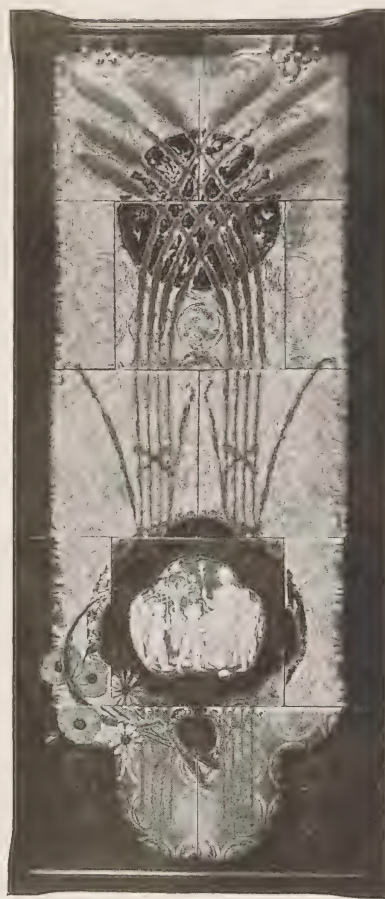
In these articles I have carefully avoided the science of abstract formulae, but on the contrary have adopted the science of immediate and empirical application, which the humblest ceramist will be able to understand. The given data will be certain, the mixtures simple and producing on the same material constant effects, according to the firing for which they have been created, but these effects will vary with the body used.

Of course I will leave out every thing which relates to low muffle firings. These are known everywhere, and nothing will be found in them which could be of any use for grand feu ceramics. They are consequently of no interest here, which does not mean that I wish to bring into disrepute an art which has shone with great brilliancy and has given birth to many beautiful works, which fill the museums and belong to the history of ceramics. I only mean that these muffle firings having been a step in the evolution toward grand feu ceramics have no *raison d'être* now that the latter have been created, but are repetitions and contrary to the law of progress, which is characterised by a march forward. This forward march opens in ceramics unsuspected horizons, more in harmony with the strenuous fight of mind against matter, and more fascinating in their results. I do not want a better proof of this than the splendid blossoming of grand feu works which has taken place in the last fifteen years, and the favor with which

both public and collectors have met this production with its new and surprising effects. Whatever the number of discoveries made during that time, almost every thing still remains to be conquered, and the field cannot be harvested so that newcomers will not find much to glean.

I have told in a former article how the grand feu palette was developed at Sèvres, and I will now say what this palette is and what a rich field it covers.

The number of grand feu colors and glazes is limited, because few coloring substances can resist the high temperature for firing hard porcelain and grès. Metals only can supply them. However, as there are 49 known metals with the whole series of their binary and tertiary compounds, the field of exploration remains fruitful. The first combinations were



Panel in kaolinic grès, by Taxile Doat, purchased by the French Government for the Musée du Luxembourg.

Subject of medallion, Ceres; white *pâte sur pâte* on lapis-lazuli blue ground. Lambrequin, mat light green with scattered wheat heads in yellow bright glaze. Cartouche, mat crystalline dark brown with red poppies, white daisies and the sickle in golden yellow. The wheat stems, which cross each other on a disc of bright glaze, are yellow with snowy white on edges.

made by adding the coloring oxides to a porcelain paste mixed with water. The first attempt was made with chrome, the second with cobalt.

Cobalt and its compounds give blue colors. This metal is employed, either as a chemically pure oxide, or in the form of arseniate, carbonate and even phosphate. Variations of tones can be obtained by adding to it colorless oxides, like zinc and

*In the United States "Seger's Collected Writings," recently translated into English, will be found a most invaluable help.—Ed.

aluminum, or by increasing its penetrating power by the addition of nickel.

Chrome is the basis of greens, from light green or celadon to the dark malachite green. It can be modified by the addition of cobalt and aluminum. Combined with other materials it gives a wide series of tones. Thus pink is a combination of chrome, zinc and aluminum. Combined with lead, it gives yellow; with iron, brown.

Nickel which has a great affinity for cobalt, is almost always found close to it in nature. The brown palette comes from this metal which possesses the greatest power for penetrating vitrified matter.

Copper, a marvelous metal, runs, during firing, through the whole gamut of the most opposite tones. According to the atmosphere in which it is developed, it gives black, green, turquoise blue and scarlet red. It becomes metal, flows, is translucent or opaque, according to the materials with which it is mixed. And if it is the most difficult metal to control, it is also the good fairy of ceramists because of the charm of its unexpected effects.

Iron, so common in nature, is used in all its forms, cochthar, battitures, bol d' Armenie, Terre de Sienne, yellow or red ochre, ferruginous silicate of Thiviers, etc. It is the basis for browns, reds and violets. It is both a source of trouble and a providence to ceramists, troublesome because it gets incrustated in the white, and providential because of the variety of tones which it gives to other metals.

Uranium is, like copper, among the erratic metals. It gives both yellows and blacks, going from citron yellow to yellow brown, and from grey to deep black.

Manganese, either common or ferruginous, and pure metallic manganese may enter into coloring combinations. They produce brownish black, violet, reddish brown and yellow. In most cases this coloring gives metallic reflections.

Iridium gives greyish blacks of a great delicacy and of great charm.

Platinum gives to the flux of the body and the vitreous glaze only a lead grey color half-way between the color of silver and that of tin, but it is the only metal which gives fixed tones which vary neither in oxidising nor reducing fires.

The two precious metals, gold (1030°C) and silver (770°C), which melt at comparatively low temperatures, disappear in porcelain firing.

The metals which I have just mentioned are those which have already been used by ceramists as coloring agents, but their combinations are far from being exhausted. And other metals are just beginning to be experimented on. Molybdenum, ruthenium, titanium, vanadium which have a great future, will tempt bold experimenters.

Metallic oxides and their compounds act differently according to the nature of the atmosphere in the kiln. They must be studied for the kind of firing in which they will be used. So uranium gives black in reducing, yellow in oxidising. Copper, green in oxidising, is red in reducing. From this fact it will be seen that the scientific regulation of the kiln atmospheres has doubled the coloring resources. But certain metals, zinc for instance, are volatilized and completely disappear in a reducing atmosphere.

Ceramists who use only one or two metals have not any mistakes to fear, but those who want a varied palette must carefully label their colors, in order to avoid disappointments such as I had one day when I accidentally used a celadon of copper glaze instead of a celadon of iron. The vase, when passing through a reducing atmosphere, became of a blackish red which concealed all the decoration. This was due to the

fact that oxidised or desoxidised gases, according to the atmosphere, favor by affinity the development of one of the metals which enter into the composition.

Coloring oxides may be combined either with the paste or with the glaze. They give different effects with these different combinations.

When the color is mixed with the paste, it forms with it an opaque mass which remains fixed, is not displaced, and allows the superimposition of other pastes. This constitutes what is called *colored pastes*.

If the same coloring matter is added to the glaze, the latter becomes more fusible and acquires a tendency to flow, thus making it impossible to superimpose a decoration. This combination gives the *colored glazes*.

These two processes complete each other, as the colored glaze may safely flow over a paste decoration which remains fixed.

Colored pastes are not of a complex preparation. It is sufficient to add to the white paste a few grammes of coloring oxide and to mix with water.

The greens which I use in the shape of paste are prepared as follows by simple grinding:

<i>Light celadon.</i>		<i>Dark celadon.</i>	
Chrome oxide	2	Chrome oxide	5
PN white paste	98	PN white paste	95
	100		100

One may go up to 10% chrome. Although these two colors stand both firings, the light celadon is finer in oxidising, and the dark celadon in reducing.

If only a small quantity of paste is needed, the mixture can be made on a rough glass with a muller; and with water. For a quantity of more than one pound, a hand mill should be used. Chrome pastes have a remarkable distinction and delicacy, but have not a great power of infiltration through other pastes. In order to give more delicacy to their combinations, one may add to them from 3 to 5 grammes zinc oxide.

The blue pastes which I use are made as follows:

<i>Light blue—</i>	Cobalt oxide	2,50
	PN white paste	97,50
		100
<i>Medium blue—</i>	Cobalt oxide	4,00
	PN white paste	96,00
		100
<i>Very dark blue—</i>	Cobalt oxide	10,00
	PN white paste	90,00
		100

Cobalt has a very great coloring power, but must be ridden of the nickel which it contains and for which it has a great affinity. If on a cobaltiferous paste another colored paste, or simply a white paste, is laid, the latter will be penetrated by the cobalt oxide. This infiltration through a white paste laid over a cobaltiferous paste, has given birth to the process of decoration called *pate sur pate* or applied pastes.

Colored pastes must have the following qualities: such a degree of plasticity that they can securely be applied to the piece and make a whole with it; coefficient of expansion identical to that of the porcelain itself, so that creasing, blisters and cracks will be avoided. Besides they must be mixed as thoroughly as possible either by grinding or fritting, so that they will give uniform tones without spots or shading.

The mixture by grinding is very simple. It is done with a muller and a palette knife.

The mixture by fritting is more complex and requires practice. A *frit* is the product of the calcination or fusion of

many substances, so that they will be intimately mixed and incorporated with each other. It is made in a fire clay crucible. This crucible, containing the substances to be fritted, is placed in the hottest part of the kiln, where it passes through the different temperatures of the firing and undergoes a partial or complete fusion. If there has been only calcination, the crucible, when taken out of the kiln, is simply emptied, and the calcined product mixed in the mill. But if the materials have fused, they are stuck to the crucible, which must be broken, to allow the gathering of all the vitrified substance which then will be crushed and ground, and will be used in the shape of impalpable flour. It is in the upper part of my kiln that I place the crucibles. If the mixture is liable to overflow, an old bat should be placed under the crucible to protect the placing material. My crucibles are made of placing material (Provins clay and grog) and have the shape of Fig. A, with a spout. I



Fig. A.

buy them from Mr. Pollard, rue du Poteau No. 59, Paris. The most useful are about 8 inches high and 4 inches in diameter.*

Dark blue paste is obtained by thoroughly mixing in the crucible and fusing moderately the following materials:

	Fontainebleau sand	54
<i>Frit</i>	Pure and very white clayey kaolin	45
	Cobalt oxide free from nickel	11

This frit crushed and ground is mixed with the paste in the following proportion:

	Clayey kaolin	45
	PN white paste	71 both for oxidising and re-
	Frit	57 ducing atmospheres.

A moderate fusion can be obtained by placing the crucible at the bottom of the kiln, a strong fusion by placing it on top, of course in a down draft kiln; inversely in an up draft kiln.

For some very weak frittings, I have made a hole in the bottom of the kiln. Protected by a depth of a foot the crucibles receive a very mild heat. As much as possible I avoid fritting, but it must be admitted that it is the surest way to obtain a thorough incorporation of the coloring matter with the paste and their intimate mixture. Pastes which have not been fritted have a rough appearance and are sprinkled with spots, which are not shown on fritted pastes. The latter harmonize better with the precious porcelain material. For this reason fritting is to be recommended, but it is slow and expensive.

Blueish Green Paste

Strong fritting	{ Fontainebleau sand	30
	{ Pure clayey kaolin	22
	{ Chromate of cobalt	7

To be mixed by grinding in a hand mill, if no motive power is to be had.

Mixture	{ Clayey kaolin	43
	{ PN white paste	90 for oxidising firing.
	{ Frit	55

Green Paste

Very strong fritting	{ Fontainebleau sand	30
	{ Clayey kaolin	25
	{ Feldspar in flour	75
	{ Chrome oxide	20

Intimate mixture	{ Clayey kaolin	20
	{ PN white paste	85 for oxidising and reducing
	{ Frit	30 firings.

Mauve Paste

Simple mixture	{ Chrome aluminate	30
	{ Feldspar in flour	20 strictly oxidising firing.
	{ PN white paste	30

Black Paste

Strong fritting	{ Clayey kaolin	50
	{ Chromate of iron	15
	{ Cobalt oxide	6

Mixture	{ PN white paste	75
	{ Frit	30 for oxidising firing.

Grey of Platinum Paste

Simple mixture	{ Platinum oxide	2	Light grey.
	{ PN white paste	98	Dark grey.
			6

for oxidising and reducing firings, very fine tone in oxidising.

In all these formulae, the PN body may of course be replaced by any other porcelain paste which will be adopted. But one must carefully avoid putting a color made with a certain paste over a paste of a different composition. It is better to use for these color mixtures, not the fresh porcelain paste, but the scraps of paste which are gathered on the wheel after throwing. They have the advantage of having been worked and being more plastic.

The pastes which I have mentioned do not suit grès, as its coefficient of expansion is different, besides they give on grès only neutral, grey tones. *They are exclusive to porcelain.*

Colored pastes are applied either on raw or baked pieces, quite thick, *in successive layers*, each layer being dried. They are applied either with the decorating brush or with a fine sponge when large surfaces must be covered. To lay the paste in one coat would be to surely produce crackles and blisters. It must be laid very carefully in the shape of very thin slip for the first coat, gradually thickened for the following coats. It is mixed in water without the addition of gum.

Over these pastes, which are not displaced in the firing, can be made, by a superimposition of white paste, the fine bas reliefs, which are called pâtes sur pâtes, and are known everywhere.

When the design has been traced over the colored paste, either with a pencil or a pouncer, it is covered with slip of white paste laid in successive coats and of different thicknesses according to the effects to be obtained. The water is absorbed by the raw body and the paste is gradually deposited. When the desired thickness is acquired, the paste, thoroughly dry, is modelled with an iron dented chisel such as is used for medal engraving. During the firing the coloring oxide of the under paste penetrates the white applied paste according to its coloring power and gives it in the thin parts a transparency which reminds one of the precious effects of cameo. Blue and green pastes possess the greatest penetrating power. For this reason bas reliefs executed over these pastes must be made thicker.

Colored pastes being opaque are naturally mat after firing. To give them the necessary brilliancy and glassy finish they must be covered with a glaze, which will preserve them from the injuries of time, and distinguish them from the bas reliefs made in Wedgwood style.

*The plumbago crucibles of the Dixon Graphite Co. are excellent.



TRUMPET FLOWER—K. E. CHERRY

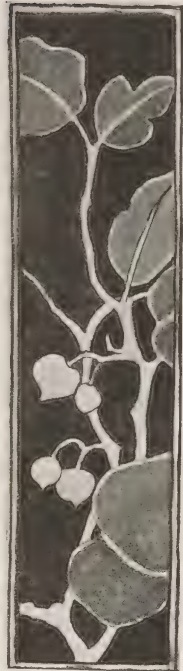
FIRST Fire—Flowers, Yellow Red, Blood Red for principal bunch; Yellow, Brown, Yellow Red, shade with Yellow Red and Brown Green.

Leaves, Shading Green and Violet, shade with shading and a little black.

Second Fire—Flowers, wash flowers with Yellow Red and Carnation; darkest touches with Blood Red and Auburn brown. Leaves, wash with Apple Green, dark touches, Moss Green and Black. Backgrounds, Yellow, Yellow Brown, Violet and Blood Red.



C. A. Pratt, N. Y. Class.



L. Tuttle, N. Y. Class.

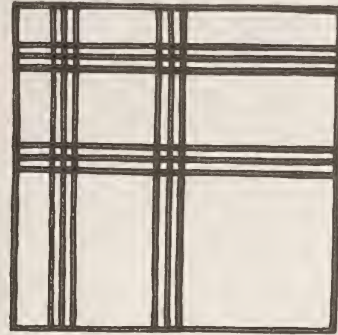
CLASS IN CERAMIC DESIGN

MARSHAL FRY, Instructor

THE Spring exhibit of the work of the class in ceramic design under Marshal Fry of New York, was one of the most interesting events of the season in the field of overglaze decoration.

The dignity given to the work by the absence of the commercial or sale element and the arrangement of the exhibit were points to be noticed. The studios were cleaned of everything except the work, no curios, draperies, or furniture detracted from the educational object of the exhibit, and the general effect was that of galleries devoted to an exhibition.

and continuing around the room with the best work of each succeeding lesson, illustrating the study of other elementary principles, the balance of color in tones of grey applied to flower and landscape drawings. The designing of repeated motifs composing a border, the application of these designs to plates and cups and saucers in the blue and grey or blue, green and grey—finally the applying of designs to bowls, vases, pitchers and other ceramic forms in full color.



Mrs. J. A. Ten Eyck, Bridgeport Class.

In the smaller studio were shown the designs carried out on the china itself, shown on bare tables—the pieces in blues, greens, and greys were grouped on a fumed oak Stickley table, while the blue and grey plates were placed above on a plate rack of the same wood. The pieces in warmer color schemes were also grouped by themselves.

Every one seemed impressed by the demonstration of the evolution from first simple exercises in design to the complete work on porcelain. The large attendance and the pleasure and interest shown were a great note of encouragement in the new movement toward proper ceramic decoration and this was the more marked, coming from students who had long been accustomed to the naturalistic painting of china rather than the decorative treatment of objects.



Elizabeth Libby, Bridgeport Class.



Jessie Ivory, New York Class.

The entire wall spaces of the large studio were devoted to the result of the year's work in ceramic design on paper. This was arranged in the order in which it was done, beginning with the work of the first lessons, illustrating artistic division of space by straight and curved lines, flower and landscape lines,

The pitchers and bowls were the most unusual in color and design treatment. The pitcher by Mrs. Hanford was a most interesting conventionalization of the daisy or chrysanthemum motif and very successful in color. The pitcher was

laid with an allover ground of light olive brown, on this were painted the flower petals and a triangular line at the bottom in a reddish tone, the calyx an apple green, the balance of design in two tones of olive green.

Two bowls by Nora Foster were very nice in design and color; the tree design in green and blue on a green grey ground, a touch of warm light brown introduced in the trunks and the line below the grass line. The berry bowl was in warmer tones, the ground of border being a warm light brown on which were laid the berries in a reddish tone, the balance of design carried out in two tones of olive green.



Jessie Ivory, New York Class.



C. A. Pratt, New York Class.

Mrs. Marie Crilley Wilson, perhaps, shows the most versatility—the quaint little child's bowl was most attractive and the fact that the tree trunks grow in front of the house and the foliage behind, in no way detracts from the charming effect. The sky and grass were a light grey blue, the distant path and roof of house a grey green, the house and light wavy line below a light greenish grey, while the trees, the base and outlines completed the effect in a dark grey blue. The bowl with tree design was also very nice, the vase a light olive brown, the sky, bands and outlines in dull blue, the trees, dull green and the distance a grey brown. The pitcher design was perhaps a little too elaborated but was quaint and interesting, the light ground, a light olive brown, the tree trunks a violet grey,



Ophelia Foley, Correspondence Class.

leaves a warm green and oranges with a wash of reddish tone; this coloring was held together by outlines, base and handle of black.

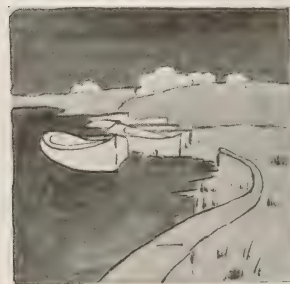
The amount of earnest work shown in this exhibit of the winter's work shows that an interest and a joy in the work itself has been aroused in the pupils—this is more than half the battle and we feel that Mr. Fry should be most encouraged in this new venture and other decorators also should feel the same inspiration, for this exhibit proves beyond a doubt that the work can not only be made to satisfy artistic taste, but may also be profitable in a financial way.



Mary Anderson, Correspondence Class.



Euphemia Wilmarth, New York Class.

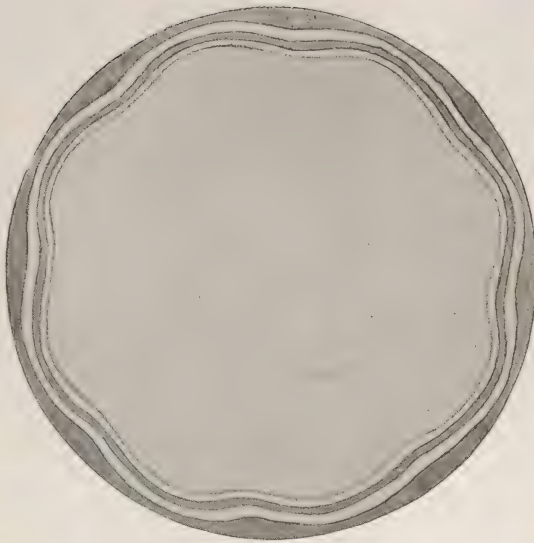


Jeannette Williams, Correspondence Class



Minna Meinke, New York Class.

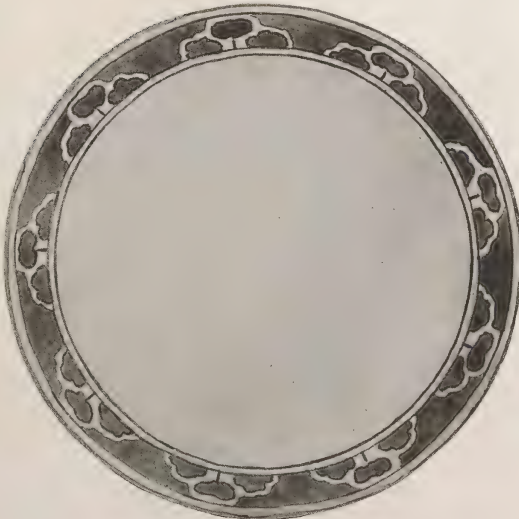
Maria Cullley Wilson, New York Class.



Mrs. Hamford, Bridgeport Class.



Harriet B. Hurd, Bridgeport Class.





E. B. Wilmarth, New York Class.



E. Hesselmeier, Correspondence Class.



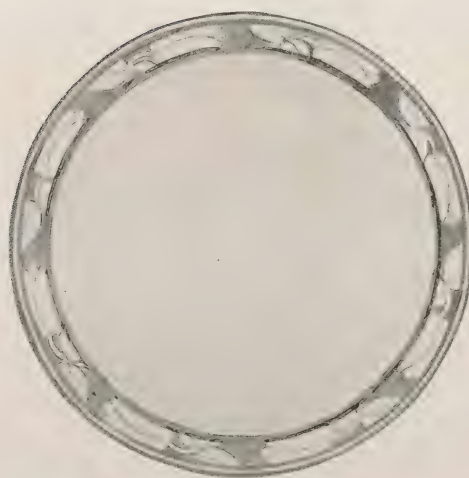
Elizabeth Libby, Bridgeport Class.



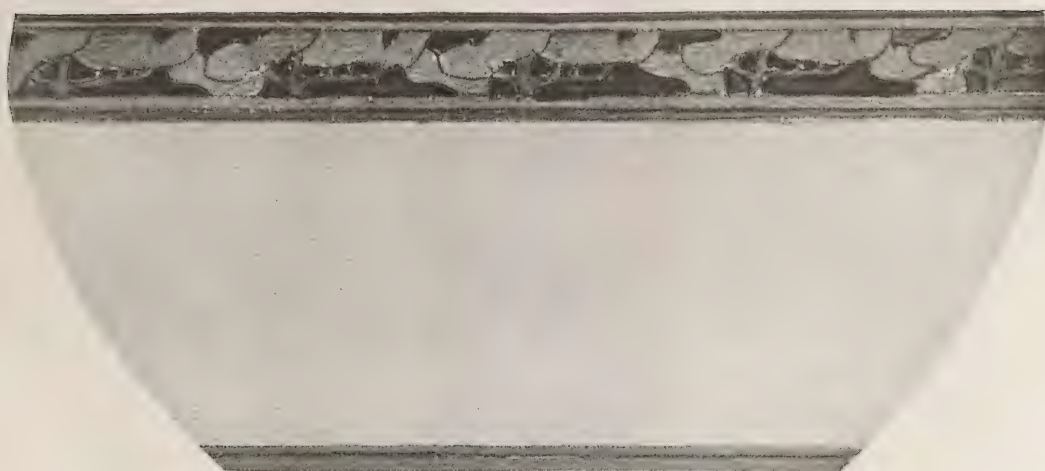
Anna B. Leonard, New York Class.



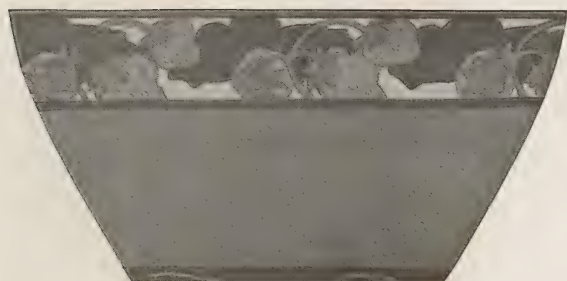
E. A. Methfessel, New York Class.



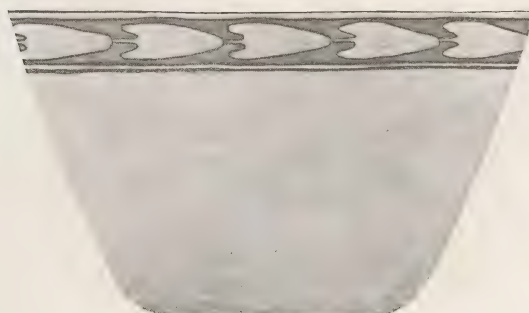
L. Knotts, New York Class.



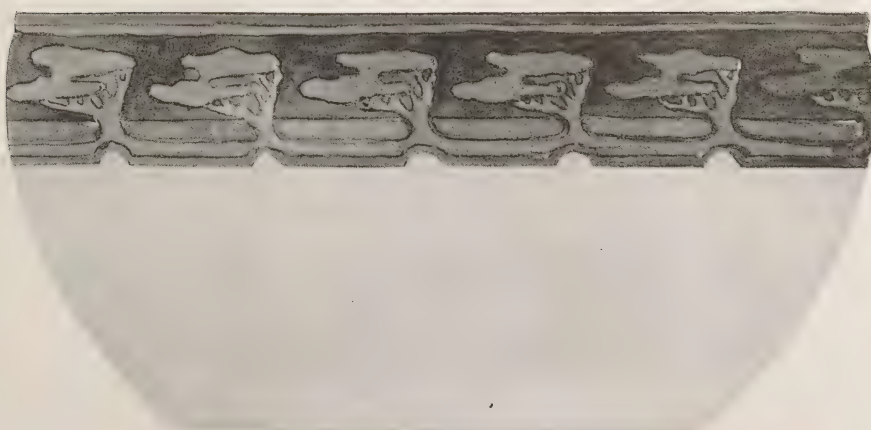
Nora L. Foster, New York Class.



Nora L. Foster, New York Class.



E. Kahl, New York Class.



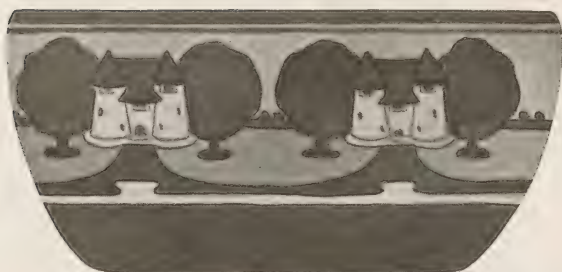
Marie Crilley Wilson, New York Class.



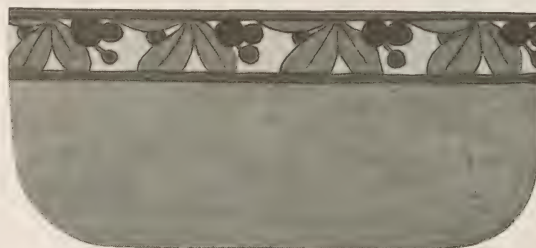
Mrs. Hanford, Bridgeport Class.



Marie Crilley Wilson, New York Class.



Marie Crilley Wilson, New York Class.



Euphemia Wilmarth, New York Class.



Minna Meinke, New York Class.



Mrs. Philip Holzer, Bridgeport Class.

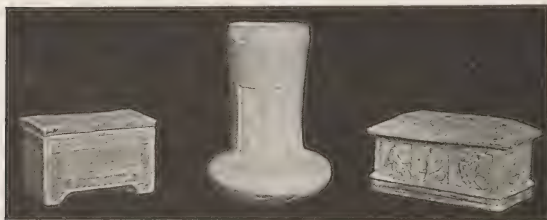


Martha Beach, Bridgeport Class.



EXHIBITION NOTICE

AT the Young Women's Christian Association of East Fifteenth Street, New York, an exhibition of students' work from the art department was held in their studio for a week commencing May 18th.



Miss S. A. Walker's pupils had some creditable work in composition, pottery and wood carving. Among the pottery the low bowls were most attractive, one with a border of rabbits carved in low relief and colored in warm brown tones with a matt finish and another in green tones. Also a tobacco box with Moorish ornament and inscription by Miss M. B. Jones. The workers in this craft have made a good start and are getting some interesting color effects which promise well for much original work.



From the evening work a chest in quartered oak by Miss I. Foster was especially good in workmanship. It was carved in low relief with motives from the Volsunga Saga and stained just enough to bring out the fine grain in the wood.

The pupils of Miss Turner had some good work in water color, also in cast drawing and designs for wall paper.

A jury of artists awarded a first-year scholarship to Miss Agnes N. Lee, and honorable mention to Miss S. Udela Montague and Miss Pearl Squire; a second-year scholarship to Miss Elsie Newell and honorable mention to Miss M. B. Jones and Miss Grace Reynolds.



PRATT INSTITUTE

THE annual exhibition of students' work at Pratt Institute, Brooklyn, was held for three days beginning May 19th. The exhibition received much commendation from the many visitors and this was more appreciated owing to the fact that much of the strong work had been sent to the St. Louis Exposition and the exhibit at the Institute therefore could not represent the whole year's work.

The exhibits were well arranged and carefully planned, giving a very clear idea of the character of the various courses.

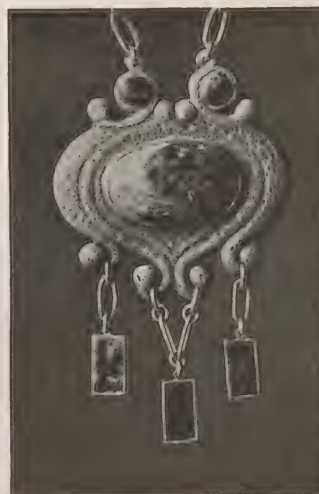
In the art department Mr. R. C. Johonnot, assisted by Miss Langtry, very successfully carried out Mr. Dow's plan of work.

The sketches and illustrations done by the members of Mr. Beck's class were exceptionally good, also the work in the portrait class under the direction of Miss Ida C. Haskell.

The pupils of Miss C. B. Seymour had some good work in studies of draped fabrics, and the water color under Miss Flumer and Miss Fisher showed advancement.

In the applied arts the metal work was unusually good. There was much original work especially in jewelery, the art quality as well as the excellent workmanship attracted much attention.

The accompanying illustrations show some of the work exhibited.



Pratt Institute.



Ellen Parker Day, Pratt Institute.



E. J. Pratt, Pratt Institute.

TREATMENT FOR VIOLETS (Page 66)

Henrietta Barclay Paist

IN the first painting of violets be very careful not to get them too purple. For any of the prepared violets a little blue is needed. In mixing a color for violets use Dresden Carmine Blue 4-5, and Ruby Purple 1-5, strengthening only the stronger portion in the second painting. For the shadowy effect use Copenhagen Blue and Gold Grey. The greens are Brown Green, Dark Green and Moss Green J., Lacroix, Fry and Mason colors, the Dark Green and Brown Green for modeling and the Moss Green for glazing in second painting. Carry out the color scheme by using Russian Green, Albert Yellow, Pompadour, Yellow Brown and Brown Green for the background colors. Beginning at the upper left hand corner with Russian Green work down in the yellow and yellow brown effect, using a little flush of Pompadour between the blue and yellow to prevent a greenish tone. Warm up the lower right hand corner as much as desired with the Yellow Brown, Pompadour and Brown Green, a touch of Yellow in the center and prominent flowers only, and a little touch of stronger violet at either side of the center. If the violets are not already purple enough in the second painting a little Rose can be flushed across the shadowy side of the bunches—blending into the background. Much depends on the shadowy effects—do not bring out too many in detail.

* *

Mr. Charles L. Pendleton of Providence, has given to the Rhode Island School of Design the art collection which he has gathered through a great many years of collecting. His collection comprises eighteenth-century English and colonial furniture, pictures, antique Chinese porcelains, Chinese china of the eighteenth-century, early eighteenth-century English pottery, antique rugs and sixteenth-century textiles.



Mary E. Peckham, Pratt Institute.



VIOLETS—HENRIETTA BARCLAY PAIST

THE CRAFTS

WOOD CARVING AND PYROGRAPHY. LEATHER AND METAL. BASKETRY, ETC.

Under the management of Miss Emily Peacock, 6 Brevoort Place, Brooklyn, N. Y. All inquiries in regard to the various Crafts are to be sent to the above address, but will be answered in the magazine under this head.

FURNITURE FOR CAMP AND COTTAGE

Elisabeth Saugstad

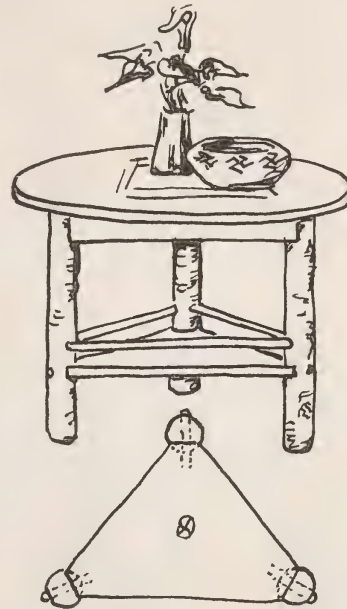
EACH year an increasing number of families of moderate means are realizing not only the desirability, but the possibility of having a little summer home in some unspoiled spot by the sea or in the woods; because tastes are growing simpler, and because all the talk and visible evidences of handicraft and manual training carry the conviction that the elementary uses of saw and hammer, for instance, are quite within the capacity of a person of even very ordinary intelligence and while it might not be advisable for the beginner to attempt the problems of building the shelter, yet the interior furnishing and finishing offer an opportunity for greatly reducing expense while adding much to pleasure and interest.

Of course such finish and furniture should be in harmony with the "architecture," whether it be a shack of "slab-sides," a log-cabin with rough stone chimney or a more finished cottage of shingle or stone. But even for the first instance I cannot commend the usual type of rustic furniture, shaggy barked, gnarled and knotted, with the structural members weak and no end of fussy and meaningless detail. It is neither comfortable nor practical. The rough bark is unpleasant to the touch, and eventually peels off—not altogether a disadvantage!—and when the material is cedar, as it often is, it exudes what seems a particularly sticky gum from cut ends and knots.

Wood with smooth, close clinging bark, is, of course, quite a different matter, and with the simple treatment which should be the keynote of the summer resting place, may be made most desirable and attractive. Where the beautiful white birch abounds there, are delightful possibilities, but a true woods lover will not cut carelessly or wantonly. The smooth, straight young trees are the ones to choose, and in illustrations I to IV I have suggested some ways of use. The

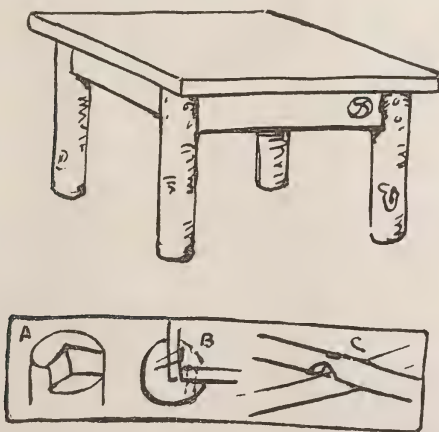
loose. Dowel wood is best for pegs if it is possible to get it, for it is difficult and tiresome to make pegs true by hand; there is no gain, and much time lost.

A table of any size may be made in the same way as the stool. For a large table for a living and dining room a good proportion is 6 feet long, 4 feet wide, and 30 inches high. The legs from 4 to 5 inches in diameter; the frame 5 inches deep and the top from 1 to 1½ inches thick. This will seat six persons very comfortably, and eight without crowding. Cross-braces would add not only to the appearance but to the stability in so large a table, but would considerably increase the difficulties of construction. Saplings 2 to 3 inches in diameter should be used, with the ends cut into tongues to fit in mortises in the legs and pegs put through at right angles. C in the diagram in III. I shows how the braces may overlap with a peg through the center.



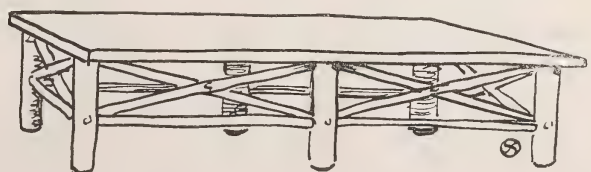
No. II

The frame of the small round table is set in in the same way as the square, the angles, of course, being different. The shelf is set in grooves in the legs and pegged through as in the diagram. The rods above the shelf are of small, straight branches, and may be omitted.



No. I

diagram in III. I shows the manner of construction in *a* and *b*. The legs are cut the desired height and the angle cut out to the depth of the frame, partly by the saw and the rest by the chisel; the frame may be nailed in with stout nails from the inside, or pegs may go all the way through and be glued, for though they may fit tight at first they may shrink and work



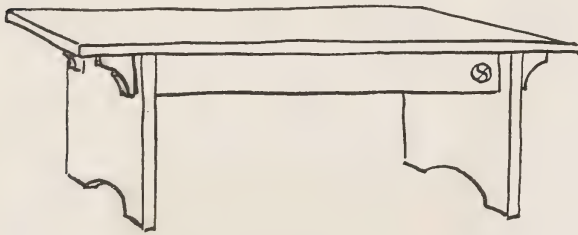
No. III

The long bench in III. III might be used on the porch,



No. IV

against the wall inside, or in place of chairs at the table, for chairs are difficult to make and the beginner rarely, if ever, succeeds in making one both comfortable and pleasing in appearance. The bench, as shown, is not easy to make, but it can be simplified, if desired, either by leaving out the straight braces, or by making them somewhat larger, placing them nearer the top and leaving out the cross pieces. Or a bench may be constructed like the stool, with a frame set in the stout legs.



No. V

The settle in Ill. IV would be very attractive under a long window, and with a comfortable mattress might serve as an extra bed. If longer than 6 feet a foot should be placed in the center for additional support, or two, about 18 inches from either end. The frame can be mortised in the legs, or set in an angle cut out as in Ill. I, which is easier.

The boards used in connection with these rustic pieces may be pine, spruce or hemlock, or whatever is most available; and they may be left as they come from the mill or planed, as seems most in harmony with the general finish. In either case, a stain will add wonderfully to the beauty of the result. With the delicate white birch a clear, soft leaf green, or a not very dark grey-green will be delightful. For woods with brown bark the boards may be stained brown to match, or they may be leaf green or bronze green.

Illustrations V, VI and VII are suggestions for "plank" furniture, and the variations possible are almost endless. When carefully proportioned, built and stained, it is very useful and pleasing. I would not advise the use of boards wider than 15 or 16 inches, and joining two narrow planks increases the difficulty very much. Ten to 12 inches is deep enough for the book-shelves; 12 to 14 for the bench and 15 for the washstand. There are various ways in which these pieces may be joined; the blind mortise and tenon, which is difficult and does not offer any advantage over the use of dowels, either blind or

coming through, as pegs; and the keyed mortise and tenon, which though most difficult of all, adds much to the appearance of this particular type of furniture. It is strong and practical in pieces that are not much moved about, in which case the pegs may work loose.

A set of shelves like Ill. VII, but 20 to 30 inches across the front, and with doors in the upper part and curtains below, makes a very good chiffonier to go with the washstand. In the three pieces drawn I have shown various ways of shaping the feet and brackets, and there are many more; but all curves that go across the grain would need a compass saw. Curves with the grain can be made with a stout knife or draw knife. An inverted V, more or less obtuse, can be used at the foot, and can be made with the ordinary cross-cut saw.



No. VI

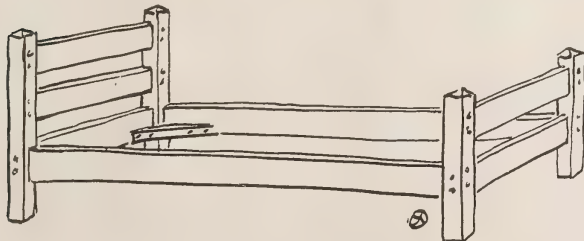
The bed in ill. VIII is made with 4 inch squares and the frame about 1 inch thick and from 4 to 6 inches wide. It may be mortised in and pegged or it may be dowelled, or set in an angle cut out as in the stool, ill. I. A stout piece screwed or nailed diagonally across the corner will make a support for springs; or an inch square strip may be fastened at the bottom of the sides on which slats may rest. Ill IX shows two ways of making a simple couch or cot without head or foot.

The most satisfactory way to finish this furniture is with the simple stain I have suggested. It is made by mixing ordinary painters' colors, ground in oil, and which come in small



No. VII.

tin cans, in 3 parts of boiled linseed oil and 1 part of turpentine. Medium chrome green toned with a little black (ivory or lamp black) for leaf greens; or with Vandyke brown for various shades of bronze-greens, or with more black for grey-greens; and all the shades of the brown alone, or made warmer and richer with a little burnt sienna, are all the colors needed or that are safe, satisfactory and artistic in the hands of beginners. Paint is satisfactory on this "plank" furniture when it has been

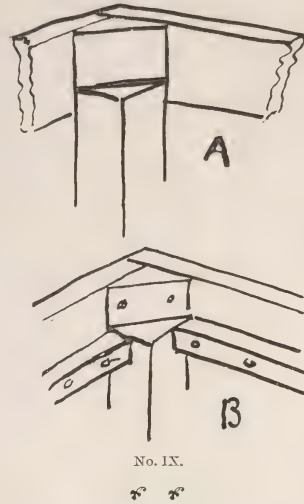


No. VIII.

well planed and smoothed with sandpaper. The best colors are ivory white, and many greens—apple green, leaf green, sage green, bronze green and hunter's green—a few shades of red; but no browns are good for this purpose in paint.

An elaborate outfit of tools is not necessary. It is wonderful how much can be done with a medium sized cross-cut saw and a hammer. Add to these a half-inch chisel, a $\frac{3}{8}$ bit, a jack-plane, a compass saw for curves, a draw-knife, or good, stout knife (a Sloyd knife, for instance), a try-square and ruler, and an ingenious person ought to be pretty well equipped. A rip

saw would, of course, be desirable for its purpose, and a block plane for finishing end wood.



No. IX.

MAKING A SILVER TEA STRAINER

Emily F. Peacock

A real tea strainer can truly be a thing of beauty and a joy forever. In this problem, so many different ideas in size and shape can be carried out. One of the chief points though is to make the holes in the strainer just large enough for the tea to run through easily; if there is a handle, to have it long enough, and if the strainer is to rest on the top of a cup, to have the rim large enough without seeming clumsy.

Materials for the large tea strainer; a piece of silver $5\frac{1}{2} \times 4\frac{1}{2}$, 22 gauge.



TOOLS REQUIRED

Saw frame, metal saws, size 01, hand or lathe drill, drills, steel compass, steel point, vise and pattern block made from a 4 inch cube of hard wood carved slightly concave on one side as in profile (Fig. 1), files and emery cloth.

METHOD

Make a circle $2\frac{1}{4}$ inches in diameter in the center of the silver with the steel compass, inside this circle make several concentric ones as in Fig. 2, cut or saw the silver along the outside line, and smooth the edge with a file. Put the pattern block firmly in the vise, concave side uppermost, place the silver on this, and begin to hammer it into the hollow, just outside the circle. Make close even strokes and work spirally to the center. Continue this process until the strainer is deep enough, about

one inch in the center, not forgetting to anneal the silver whenever it sounds hard. If the rim of tea strainer should buckle, straighten it with a wood hammer. The design on the

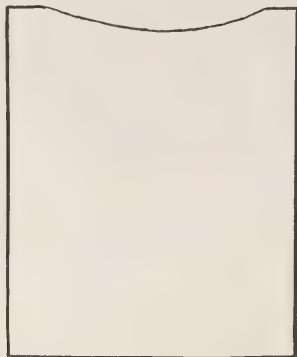


Fig. 1

rim can either be pierced, etched, or repoussed, in any case it must be put on first with a steel point. If it is pierced, a hole must be drilled for the saw wherever there is to be a space, and

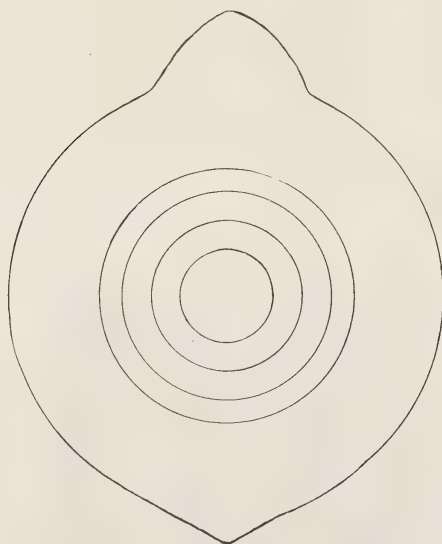


Fig. 2.

the design carefully sawed out. All the edges should be made smooth with a small half round finishing file, and the handle part slightly repoussed from the back.

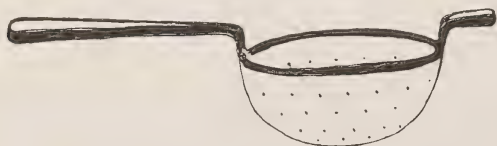


Fig. 3.

The last step is to drill the holes for the strainer, find the center of this, and make several circles for a guide. A pattern can be made in the strainer, or simply circles of holes. Before

drilling always start the hole with a steel punch, so that the drill will not slip.

The smaller tea strainer by Miss E. J. Pratt is very attractive, and simpler to make, not having a rim to deal with. It is started in the same way as the large one, and finished by hammering over a steel ball the right size. The side pieces are pierced and soldered on.

A frame of silver wire combining the handle and rest, soldered on a shape of this kind, as in Fig. 3, gives a quaint finish to a tea strainer.



MATERIALS USED

A piece of silver 2 inches square, 22 gauge, also a strip $1\frac{1}{2} \times 2$, 24 gauge for the side pieces, and about 10 inches of silver wire, gauge 18.

Tools, as given before and added, round nose pliers to adjust the wire, a steel ball, a round faced hammer. For the soldering, a piece of charcoal, solder and flux, either borax or amberine.

ANSWERS TO INQUIRIES

C. K.—To clean jewelry that has no chased work, jewelers moisten the surface with a brush like that in a mucilage bottle dipped in alcohol that has a few drops of ammonia for every half pint of alcohol. Then with another brush they apply a little finely powdered whiting and polish off with a jeweler's brush. When the jewelry is chased or set with real gems the powder is washed off with soap and water and the articles are dried by putting them into fine sawdust. Stones that are in a closed setting must not be washed.

Basketry—Coiled basketry is a type of basket work in which a foundation of hard or soft material, arranged in a spiral, is held together by means of over and over sewing.

Imbricated ornament, is coiled basketry in which a strip of soft material is folded back and forth, over the stitches, over-lapping like shingles on a roof or the folds in knife plaiting. Klikitat and Fraser River basketry are imbricated.

In the coiled basket bowls of the Coahvilla Indians of Southern California, the cleaned fibre from the leaves of the Agave deserti is used to form the first few turns of the coil, which is then continued with grass stems.

Miss L. S.—Velour especially made for stencil work and burning comes in twenty seven and fifty inch widths, with a plain linen back. It ranges in price from twenty-five cents a yard up.

E. Allen—Carbon paper comes by the sheet and in several colors, white or light yellow is best for use on dark surfaces. It should always be kept from the air, exposure renders it useless.

Mrs. T. R.—A hard typewriter's eraser is a good thing to keep your platinum point clean, if the point is clean and hot, there should not be any trouble with the etching.

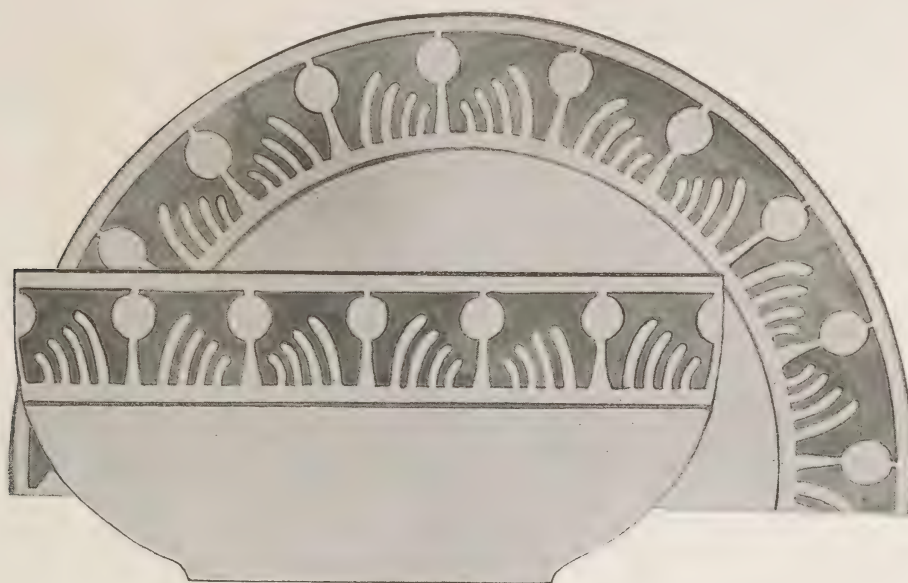
Basketry—Some aniline dyes can be used successfully in basketry. Always use the mordant properly, and after the material is dyed wash it in strong soapsuds to take out any color likely to fade. In the Diamond dyes the black is good as it is. The orange is very strong. Light red can be made more scarlet by adding scarlet, and darker by adding a little black. Bright green can be made bluer by adding blue, greyer by adding a little red, and

darker by adding black. With experience you will get interesting results.

Candlestick—The bayberry dips are about eight inches long, tapering from about one inch diameter at the bottom to about three-eighths of an inch at the burning end. The color is a peculiar green, nearer olive than anything else. You can buy them from the Jarvie Shop, 608 W. Congress Street,

Chicago, Ill. The price is a dollar and seventy-five cents a dozen, or fifteen cents each; carriage charges extra.

Mrs. J. R.—A fusing alkali might do to flux the platinum, but alkaline carbonates do not act on it. Platinum would need extremely high heat to fuse. It could be polished with *very* fine pumice and water, or whiting.



BOWL AND PLATE EXECUTED IN GREY BLUE—EMILY F. PEACOCK

ANSWERS TO CORRESPONDENTS.

This column is only for subscribers whose names appear upon our list. Please do not send stamped envelopes for reply. The editors can answer questions only in this column.

All questions to be answered in the Magazine must be received before the 10th day of the month preceding issue.

Mrs. A. G. A.—You will find in another answer the directions for mixing powder and tube colors for painting. For tinting, after having mixed powder color to the consistency of stiff tube color with the medium, add about an equal amount of fat oil, thin with oil of lavender to the desired shade.

A. G. C.—I do not know of any flux for gold excepting that given in recipe for making gold. One part pulverized borax, to twelve parts nitrate of bismuth. Copper is never used in the proper preparation of gold, the least trace of it would spoil the beautiful color the gold should be.

R. J.—Some greens are liable to turn brownish in spots, notably, Coalport and other greens of that shade, especially on Belleek. We can suggest nothing except to dust black over it. That fault is almost irremediable, although we have occasionally heard of it coming out all right in a second fire. We have known of several boxes of gold of the make you mention which dried so hard it could not be used, the oils used in its manufacture are inferior. We would suggest dissolving it off the glass with alcohol, then pour off the liquid when settled and when dry, mix freshly with a *very* little fat oil and thin with turpentine. An iron kiln should be kept well white-washed with the ordinary slaked lime, it prevents the iron affecting the color.

L. C. K.—If pink, rose, carmine or any one of the gold colors is underfired, it will come out unglazed and a brick red color and rub off, especially if put on too thick, on a piece where some of the pink glazes and some does not, the unglazed spots are more heavily painted than the others. Gold colors need a good average fire—some other colors, such as greens, may glaze in the same or a lighter fire. The pink in your case was either underfired or too heavily painted.

M. B.—For painting with powder colors, we mix with the medium usually sold with the colors and thin with turpentine. A good medium is made of 6 drops oil of copaiba to one of oil of cloves. For tube colors we thin with spirits of turpentine or oil of lavender. For tinting we use fat oil of turpentine and oil of lavender—you will find this method explained several times in back numbers of *KERAMIC STUDIO* answers to correspondents. The directions for mixing enamels, raised paste and gold are given also a number of times, and as you have been a subscriber three years you will find much valuable instruction in looking over your old file. The reason your white enamel ran into your green background was either because you used a soft enamel when you should use a hard white enamel, such as Aufsetzweis, or you did not put on enough enamel to resist the color, or your color was so deep as to absorb the enamel.

L. S. C.—The so-called "Royal Worcester" tint is a creamy matt finish, which was much used at one time in the Royal Worcester factory; it can be procured from any dealer in colors for ceramic decoration under the name of matt ivory or Royal Worcester tint.

Mrs. M. F.—Light sky blue is the palest tint of blue made. There are a number of dark blues. The depth of color, however, depends a good deal on how it is put on. Any blue will make a light tint by thinning with oil of lavender or spirits of turpentine, or your regular tinting mixture; and every dark blue will have to be put on twice or dusted heavily to show its richest depth of color. Aztec blue is a rich deep blue; Royal blue and Banded blue with Black, also make a dark color. Gold will come out fairly good over fired color if the latter is not too heavily put on, but is always richest on the white china.

If you use your monogram in the center of your plates, they should also be in center of saucers, but we would prefer a monogram on the rim, as it receives less wear and always shows, while the center of plate or cup is soiled almost immediately when in use.



CHERRIES—LOUISE M. SMITH

FIRST fire, Fruit—Use Yellow Red, shading with Pompadour and Blood Red with Albert Yellow and Yellow Brown for reflected lights. For darker cherries add a touch of Ruby to the Blood Red. Model carefully, keeping some of the fruit rather flat, as they appear back of the more prominent ones.

Keep the leaves warm in tone, adding some Blood and Ruby where they melt into the darker effects of the background.

Second Fire—Retouch with same colors, adding Blood Red to the two purple shadows, and snaps to the stems.

Third fire consists in washes to harmonize the whole.

THE BOOK OF ROSES



*Studies for the China Painter and
the Student of Water Colors*



It contains over forty pages of designs and studies, many of which have appeared in back numbers of *Keramic Studio* now out of print, and the volume is also enriched by nine color studies by the following artists: Marshal Fry, F. B. Aulich, Sara Wood-Safford, E. Louise Jenkins, Anna B. Leonard, Rhoda Holmes Nicholls and Teana McLennan Hinman.

Among the other contributors to the book we have K. E. Cherry, Mary Alta Morris, Henrietta B. Paist, Hattie V. Young Palmer, Ida C. Failing, Marianna Heath, A. A. Robineau, Sara B. Vilas, M. M. Mason, I. M. Ferris, Nellie Sheldon, F. G. Wilson, Alyce Barber Pflager, Mariam L. Candler, Mary Alley Neal, E. Mason.

The book is designed to meet the requirements of both schools of decoration, the Conventional and Naturalistic, the space devoted to each being about equally divided. Treatments for china painting are published in full and many of the designs are accompanied by treatments for water colors.

The size of page and quality of paper used is the same as *Keramic Studio*, the whole is tastefully bound and will be sent post-paid or express paid on receipt of **\$3.00**.

As the edition is a limited one, we ask you to place your order as soon as possible.

Prospectus mailed on application.

KERAMIC STUDIO PUB. CO., Syracuse, N. Y.

KEEP THE FIRE ALIVE.

KERAMIC STUDIO

CONTRIBUTORS

MRS. J. F. BERNIES ♀ ♀ ♀ ♀ ♀
MISS BEATRICE BROOKS ♀ ♀ ♀ ♀ ♀
MR. TAXILE DOAT ♀ ♀ ♀ ♀ ♀
MISS M. E. DOW ♀ ♀ ♀ ♀ ♀
MR. RUSSELL GOODWIN ♀ ♀ ♀ ♀ ♀
MISS NELLIE Y. HAMILTON ♀ ♀ ♀ ♀ ♀
MISS LETA HORLOCKER ♀ ♀ ♀ ♀ ♀
MR. W. P. JERVIS ♀ ♀ ♀ ♀ ♀
MISS CORNELIA W. LE NOIR ♀ ♀ ♀ ♀ ♀
MISS MARGARET OVERBECK ♀ ♀ ♀ ♀ ♀
MISS HANNAH B. OVERBECK ♀ ♀ ♀ ♀ ♀
MRS. HENRIETTA BARCLAY PAIST ♀ ♀ ♀ ♀ ♀
MISS EMILY F. PEACOCK ♀ ♀ ♀ ♀ ♀
MISS AUSTIN ROSSER ♀ ♀ ♀ ♀ ♀
MISS EDITH ALMA ROSS ♀ ♀ ♀ ♀ ♀
MR. F. H. RHEAD ♀ ♀ ♀ ♀ ♀
MISS ALICE B. SHARRARD ♀ ♀ ♀ ♀ ♀
MRS. ALICE WITTE SLOAN ♀ ♀ ♀ ♀ ♀
MRS. BELLE BARNETT VESEY ♀ ♀ ♀ ♀ ♀
MR. CLIFTON WINDSOR WHITE ♀ ♀ ♀ ♀ ♀
MISS LAURA ROGERS WAY ♀ ♀ ♀ ♀ ♀



AUGUST MCMIV Price 35c. Yearly Subscription \$3.50

A MONTHLY MAGAZINE FOR THE POTTER AND DECORATOR

[The entire contents of this Magazine are covered by the general copyright, and the articles must not be reprinted without special permission.]

CONTENTS FOR AUGUST 1904

	PAGE
Editorial,	73
League Notes,	73
Brush Work,	73-74
Tiles	75
Cup, Saucer and Plate—Jack-in-the-Pulpit,	76
Snow Berries,	77
Grand Feu Ceramics—XIII,	78-81
Plate, Conventionalized from Jack-in-the Pulpit,	81
Study of Golden Rod,	81
Study of Golden Rod,	82
Cup, Saucer and Plate,	83
Decorative Studies of Oleander,	84-85
Vase—Jack-in-the-Pulpit,	85
Jonquils,	86
Blue Print Studies,	87
Bee Design,	88
Childs Bread and Milk Set,	89
Cup and Saucer—Jack-in-the-Pulpit,	89
Conventional Design for Bowl,	90
Plate	91
Cup and Saucer	92
Bowl	92
The Crafts—The Stencil	93-94
Silver Salt Cellar	95
Wood Screens	95
Answers to Correspondents	96
Plate	96

Some Leading Agencies of Ceramic Studio

We take pleasure in mentioning a few of the leading agencies for the sale of the KERAMIC STUDIO, where, also, subscriptions may be placed:

Boston, Mass.—Miss E. E. Page, 286 Boylston St.; Smith & McCance, Old Corner Book Store.
 Brooklyn—A. D. Mathews & Sons, Fulton Street.
 Buffalo—Mrs. Filkins, 609 Main Street.
 Chicago—A. C. McClurg & Co., Brentano's; Burley & Co.;
 Cincinnati—Miss M. Owen, 245 Elm Street; A. B. Closson, 4th Street near Race; Traxel & Mass, 4th Street, near Elm.
 Cleveland, Ohio—Vinson & Korner, 150 Euclid Ave.
 Columbus, Ohio—Lee Roessler, 116 So. High Street.
 Dayton, Ohio—W. W. Kile & Co.
 Denver, Colo.—E. Meininger, 807 16th Street.
 Detroit, Mich.—L. B. King & Co.
 Hartford, Ct.—E. M. Sill.
 Grand Rapids, Mich.—Miller, Wolfe Co.
 Indianapolis, Ind.—Keramic Supply Co., Lemcke Building.
 Kansas City, Mo.—Emery, Bird, Thayer Co., Geo. B. Peck Co.
 Louisville—Louisville Book Store.
 Minneapolis, Minn.—Minn. Art China Co., 607 1st Ave. So.

New York City—Brentano's, Union Square; M. T. Wynne's, 11 E. 20th St.; The Fry Art Co., 36 W. 24th St.; Wanamaker's; American News Co. J. B. Ketcham, 107 W. 25th Street; M. J. Whaley, 430 5th Ave.
 Newark, N. J.—Keramic Novelty Co.
 Oakland, Cal.—Smith Bros.
 Omaha, Neb.—Megeath Stationery Co.
 Philadelphia—Wanamaker's.
 Pittsburgh, Pa.—Otto Schaffer & Bros.; Kurtz, Langbein & Schwartz; R. S. Davis & Co., 346 Fifth Ave.; John G. Yergan, 36 Fifth Street.
 Reading, Pa.—Rowland's Book Store.
 Saratoga Springs—Robson & Adce.
 San Francisco—Mrs. M. E. Perley, 207 Post Street.
 Sioux City, Ia.—J. K. Prugh, 312 Nebraska Street.
 St. Louis—F. Weber & Co.; A. S. Aloe & Co.
 Syracuse—Wolcott Book Shop; Welch & Hollingsworth; W. Y. Foote; A. L. Varney & Co., 336 S. Salina Street.
 Tacoma, Wash.—Art Exchange, Mrs. Mead.
 Toronto—The Art Metropole.
 Warren, Pa.—Alzora Bashline.
 Washington, D. C.—Woodward & Lothrop.
 The Magazine may also be ordered from any news dealer or book store in this country, who can procure it through the American News Company New York, or its branches.

KERAMIC STUDIO

Vol. VI, No. 4

SYRACUSE NEW YORK

August, 1904



It has been a difficult matter to make the ceramic fraternity understand our position in regard to decoration and we are sometimes dismayed at the misunderstanding on all sides. There is room in ceramic art for more than one style of work, as there is in so called "legitimate art" for both impressionist and academician. We be-

lieve in the naturalistic painting of flowers and other subjects—but we wish to impress on china painters the fact that such work forms a *picture* and not a *decoration* and should be treated as such—painted on a panel, framed or unframed, and hung on a wall as is an oil painting or water color of the same subject.

We believe that in order to paint such naturalistic studies so that they will rank with good paintings of the same subjects in other mediums, every china painter, whether she intends to "decorate" or not, should carefully follow such a course as has just been given in *KERAMIC STUDIO* on Principles of Design by Mr. Hugo Froehlich. It is just as necessary to observe these principles of placing, spacing, decorative lines, masses, color, etc., in painting as in decoration, if good work is to be the result. We believe in the study of historic ornament as a foundation on which we may build a style of our own and the historic style of our own age and country.

We admire the reproduction of good antique styles, Chinese, Persian, etc., as we admire any good reproduction of a work of art, but we admire more the genius that is able to abstract the art principles illustrated in these ancient masterpieces and apply them to motifs which are immediately about us and thereby produce an original work of art and one which will help in the forming of a national style of this country.

But to each one the style that most appeals is legitimate. We prefer a good naturalistic painting or reproduction of an historic ornament to a poor attempt at original decoration, the best in its line is always pleasing and poor work is not to be discouraged or encouraged, because we have all of us to pass through the stage of learning and those of us who are not so much encouraged by indiscriminating friends that they think they have no more to learn, may some day be able to do something worth while. We can not all make works of art, but we may do pleasing things. Genius is born, not made, and rare at that.

✱

We publish the best of the designs from the "Jack-in-the-Pulpit" class room but send the criticisms privately, as we find we cannot spare the space in the magazine.

✱ ✱

LEAGUE NOTES

THE Director of the Art Institute of Chicago has evinced an interest in the National League of Mineral Painters and expressed the desire that the Art Institute and the Ceramic Association become more in accord. We are therefore granted permission to hold our Advisory Board meetings at that institution.

We appreciate the generosity of our Eastern members in

voting us the management of League affairs just at this crisis. That this is a crisis, that we are evolving from mere overglaze decorators to ceramic artists, is proven by the sympathy we receive everywhere from artists and artisans, and by their opinions as expressed at the recent exhibition in New York, given by one of our Board members.

The results of serious study applied to porcelain are causing our artist friends to no longer shrug their shoulders, or stare into vacancy when we talk "shop."

A notably optimistic desire for broadness prevailed at the Advisory Board meeting last Saturday. A disposition to include all departments of pottery, thus giving each member an equal chance to develop his own particular style, remembering—imperatively—that the rudiments of art are as necessary as the rudiments of music. Whether it is the human voice, a violin, cornet, pianoforte, or drum, the same knowledge of tunes, spaces, notes, time, etc., must be mastered by those aspiring to be musicians. So in art, relation, proportion, construction, harmony of color, etc., must be mastered by those aspiring to be artists.

We urge our members to adopt the study course this year, it is absolutely *free* and is one of the benefits accruing to members of the League.

A letter of resignation to the Advisory Board from Cora A. Randall explains her inability to do justice to the League as treasurer, because she is already overburdened with club work. She expresses loyalty and a desire to aid in some department less burdensome. Mr. Albert Keith was elected to fill the vacancy.

BELLE BARNETT VESSEY,

President, N.L.M.P.

ALBERT KEITH, Treasurer,

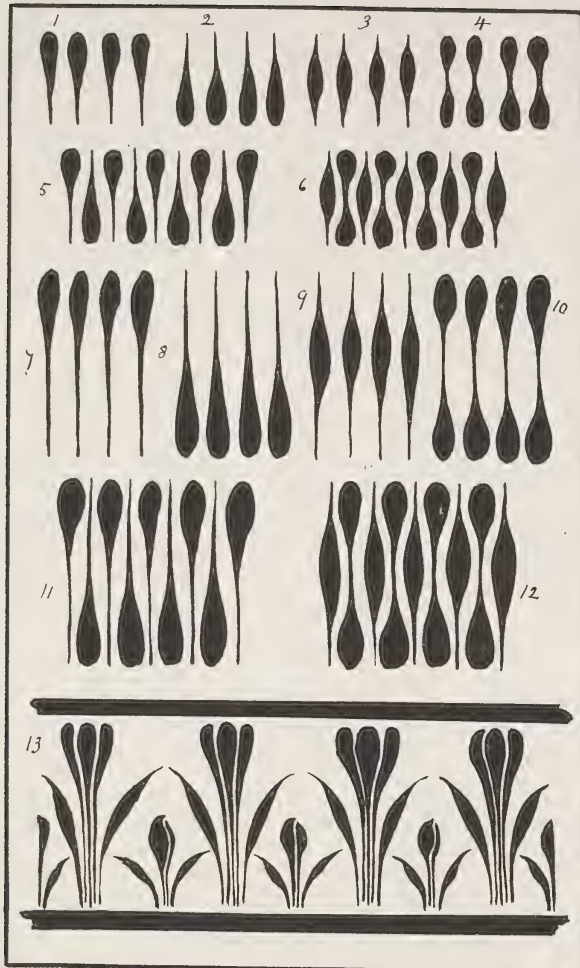
No. 5745 Madison Avenue.

✱ ✱

BRUSH WORK

As Applied to Decorative Art, by W. P. Jervis (Author of the *Encyclopedia of Ceramics*) and F. H. Rhead

IT is a matter of wonder no less than of regret that the use of the brush as a medium for expressing form is not included in the curriculum of our public schools, for to the receptive mind of the young it is just as easy to teach form as it is to teach sound. Sounds are learned by constant repetition much more than by the acquired knowledge that a certain combination of letters is required to form a word. A pupil learns to spell correctly, but his pronunciation nine times out of ten is formed from his environment, otherwise we would presumably all speak correct English, in place of the heterogeneous language now in use. It would not require a great stretch of the imagination to consider this a parallel to drawing in outline from a cast and drawing direct from an object with a brush. A student trained to draw from a cast develops the mechanical accuracy of an engraver, whilst one trained to the use of the brush attains the freedom of a painter; in other words one would be able to spell correctly, the other to speak correctly. Whatever the arguments may be pro and con the advisability of superseding line work by brush work, we cheerfully admit the impossibility of doing so for all purposes,



but before these papers are concluded we think that we shall be able to demonstrate that anyone of ordinary intelligence, without any previous knowledge of drawing, will have acquired an idea of form and its expression which it would have been impossible to attain by any other method in a course extending over several years.

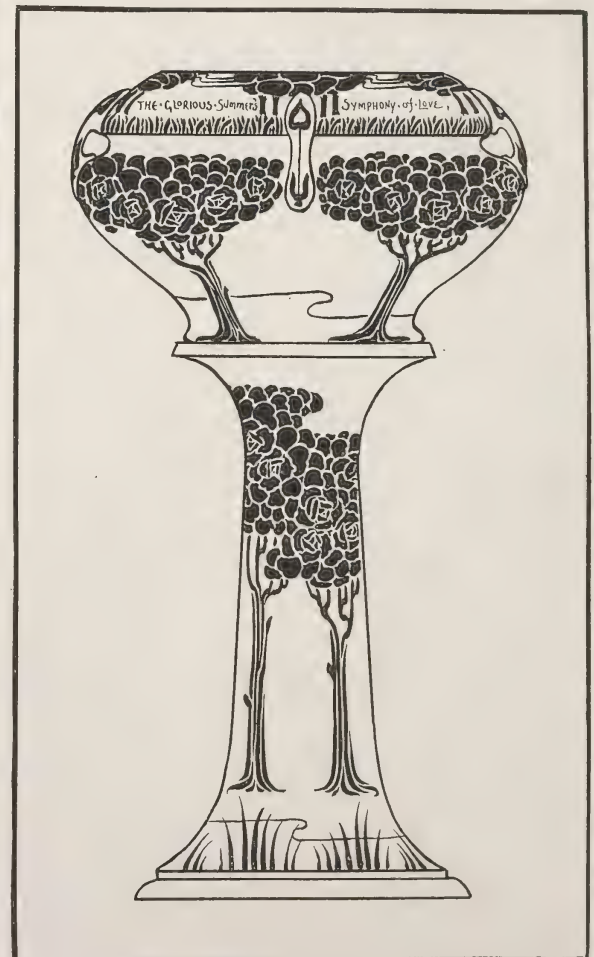
The classical designs of the Greeks, the Etruscans and the Egyptians were all produced by brush work. The Japanese use the brush exclusively and no one, however much he may cling to old traditions, will deny them the distinction of being the foremost decorative artists of the world. In England, aided by such men as Lewis F. Day and Walter Crane, the school is rapidly growing in favor, though at first discountenanced by the South Kensington Museum, a powerful factor in the dissemination and encouragement of art in England. This institution which represents the Committee of Council on Education, makes yearly grants to the various schools, awards prizes and scholarships and fosters art generally. The opposition to the movement was therefore keenly felt, but in spite of this it continued to grow and several large cities refused the grant because of its opposition to brush work and themselves provided the necessary funds, the city of London taking the lead in the movement. Finally wiser counsels prevailed at South Kensington, or perhaps to be more

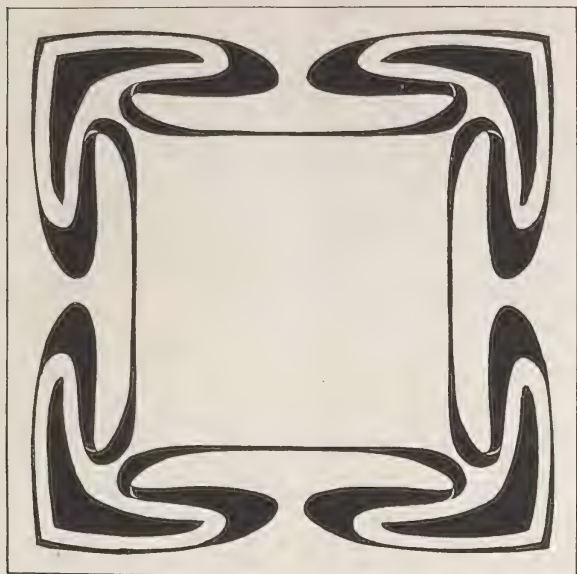
accurate, they were forced by the strength of public opinion to acquiesce in it and within the last four years shading from the cast has been gradually dropped. Drawing in outline from the cast has been wholly discarded in the examinations for head masterships, and the students' examination in outline last year had to be executed with the brush.

In the school of Art at Longton, Staffordshire, in charge of Mr. F. H. Rhead, there was a class of from seventy to one hundred day school teachers taking lessons in brush work, as the Board of Education has made it one of the subjects to be taught in the public schools.

In America the subject has not had the attention it deserves, though Mr. Liberty Tadd of Philadelphia, Mr. A. Dow of Brooklyn and Mr. J. Hall of Springfield, Mass., have all done good work in this direction. But the subject is of sufficient importance to demand concerted action in all the art schools of America and the KERAMIC STUDIO therefore feels no hesitation in asking that these articles be brought to the attention of teachers and principals of Art Schools, whenever a chance of doing so presents itself to the reader.

Too much stress cannot be laid upon the importance of teaching the use of the brush to children, even those in elementary classes, for if a child recognizes a letter by its shape and laboriously learns to draw it, how much easier will it learn to





TEA TILE IN BLUE AND WHITE—ALICE WITTE SLOAN

see the form of a leaf or other object it is brought into contact with every day. And it has been demonstrated beyond question that a child between the age of five and six years, has produced infinitely better results in copying forms with a brush than with pen or pencil. In a series of easy lessons therefore we shall endeavor to teach you primarily to see form; to express that form with a brush and by its repetition and combination form it into ornament. This being a journal devoted primarily to the ceramic art, especial attention will be given to pottery, but the student will quickly perceive its adaptability to other forms of decorative art.

LESSON I

The materials required are very simple. A few sheets of cheap drawing paper, a tube or pan of sepia water color and a number five camel's hair pencil. Be sure this has a good point. The object of the first lesson is to show the beginner how to make simple strokes of varying shapes with single strokes of the brush. That these may be of uniform size it is advisable to rule two parallel lines about an inch apart, at the top of the page, thus forming a guide for the length of the strokes, but this should be abandoned as soon as possible, as entire freedom is essential to success. Hold the brush lightly between the thumb and forefinger, the stick of the brush pointing over the right shoulder. Be sure to use plenty of water so that the color will flow freely from the brush. Stroke No. 1 is made by exerting full pressure on the brush, then draw it towards the shoulder and at the same time lifting it until it is resting on its point and standing perfectly perpendicular. Practically the brush assumes but two positions in making this stroke, 1st, pencil between finger and thumb and pointing over the right shoulder, pressure exerted on the brush which rests on the paper at an angle of about forty five degrees; 2nd, the brush perfectly perpendicular, held lightly between thumb and finger and just resting on its point. It is advisable to master each stroke before attempting another, but for variation do one row about one inch wide and another row two inches as Fig. 7. Practice this and all other strokes until you are able to do them at the rate of one every second. Fig. 2 is executed in the same method as Fig. 1, only the first position is the brush at the point and in the second it is held at full pressure

on the paper and is lifted up simultaneously with the pressure being obtained. This is a little difficult at first but it will soon be overcome by a little practice. Do not be afraid. Make your strokes were boldly and fearlessly. Brush work is nothing if it is not direct.

Fig. 3 is very simple when Fig. 2 is mastered, but you will find it a very useful and important stroke. It will be seen that full pressure of the brush is exerted in the center of the stroke and both beginning and ending with the brush at a point. Fig. 4 is a combination of Figs. 1 and 2, and though in itself it is neither useful nor ornamental it will be found an excellent shape for practice. It is the first and second shapes done in one stroke. Fig. 5 and 6 are good practice to obtain uniformity of shape. Figs 7 to 12 are simply enlargements of Figs. 1 to 6. In Fig. 13 we have used the above strokes to form a simple border. These then are the "pot-hooks and hangers" of brush work and when you have mastered their formation and can do them quickly and neatly it is a very short step to something of greater interest. As a lesson, make six similar borders to Fig. 13, using only the strokes shown. The jardiniere and pedestal is given as an example of brush work on pottery. The decoration is in colored clays.

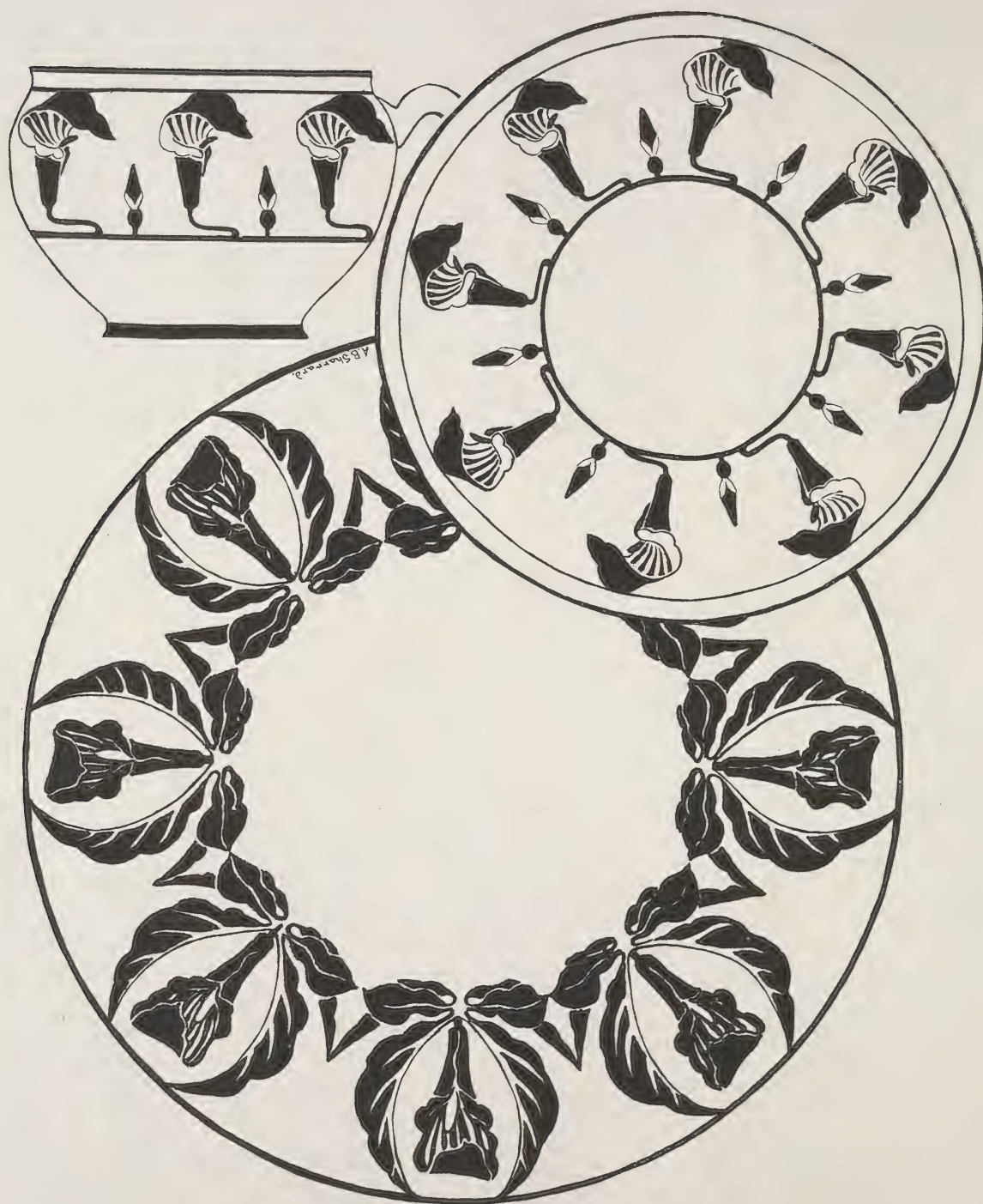
(To be Continued.)



The problem of making a design for a tile, at once striking and simple, which can be easily executed, so that the cost of production will not be great, is one of the most difficult problems to be encountered. We reproduce one executed by Mrs. Sloan, a simple abstract arrangement of lines, and one by Miss Peacock, an extreme conventionalization of a flower form. These two designs are successful in every way. There is a bigness in these designs which make them very effective whether seen at a distance or near by. Most students make the mistake of adding too many "finicky" details, which belittle the subject and detract from the dignity of its handling. A naturalistic arrangement is altogether inappropriate for a tile, which is to be used as one of several or many units, as in a tiled fire place or window box, or which is to be utilized as a teapot or flower pot stand.



TILE FOR WINDOW BOX IN BLUE OR GREEN AND WHITE—EMILY F. PEACOCK



JACK IN THE PULPIT—ALICE B. SHARRARD

This design should be carried out in different shades of green, a delicate color for the flowers, and darker shades for the leaves, or the entire set could be executed in Bronze Green or Park Green. Gold as a background or outline would add to the richness of effect.



L. Horlocker

SNOW BERRIES—L. HORLOCKER

GRAND FEU CERAMICS

XIII—GRAND FEU COLORS—Colored Glazes—Flamme Glazes—
Flowing Glazes*Taxile Doit*

COLORED pastes used on small surfaces give to the decoration a firmness and a character of solidity which are very attractive; but used on large surfaces they impart to a vase a heavy, marble like appearance. This defect led to researches for the incorporation of color with the glaze and gave birth to colored glazes. Colored glazes are real

translucent colored glasses, and the color dissolved in them is, as for pastes, derived from metallic oxides. The basis for these glazes is the colorless glaze, called white, with which the porcelain is covered, and into which are introduced by careful grinding and mixing a few hundred parts of coloring oxides.

If one wishes to obtain the exact value of tone which the formulae in these articles are capable of giving, it is necessary to use oxides free from all impurities. This purification is the duty of technical chemists. The analyses which are necessary in order to obtain the best products are minute and delicate and, consequently, slow and expensive. A ceramic artist cannot undertake them, as he must give his time to the absorbing experiments of his art. He must be, as I am, satisfied with materials as he finds them, avoiding for some tones a certain harshness which is caused by too pure materials, but in other cases, submitting to the unavoidable result of impurities.

Cobalt free from nickel gives a fine blue tone both in daylight and artificial light. When it contains nickel, it is duller in the daylight and black in the artificial light. Notwithstanding their purity, the Sèvres blues are black in artificial light, while the old Chinese blue porcelains remain blue in all kinds of light. How did these empirics of genius manage to do it?

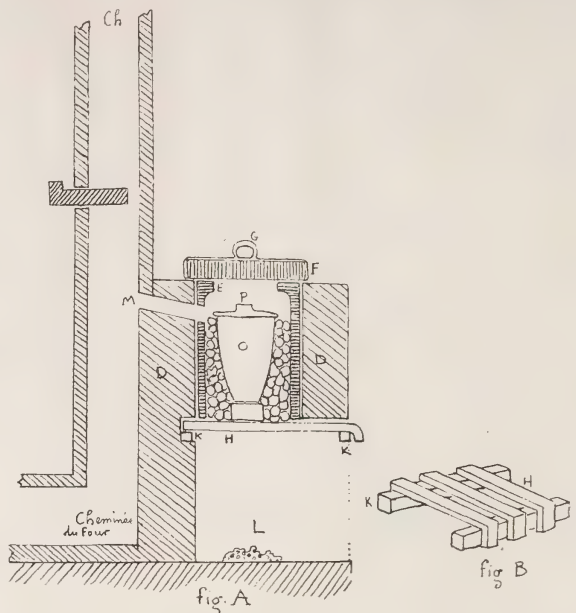
At Sèvres, all materials, before being used, are analysed in the laboratory and tried in the fire. This is the secret of the fixity and richness of colors used on the various ceramics which are made at Sèvres. For my own work I have to be satisfied with frittings and grindings made with the greatest care, and with the greatest possible precision in the conduct of the firing. And it is a great deal to succeed in doing that with modest resources.

I wish to call the attention of artists to cases in which they will be obliged to modify the formulae given below, which have been worked out for two bodies, PN and Lacroix-Ruaud. As the addition of a coloring oxide to a glaze changes its fusibility and its coefficient of expansion, the mixture must be so arranged that it will fire at the same time as the body, without crazing, and this can be done only by careful experimenting. But whether these formulae are used as I give them, or modified, it is important to maintain the degree of plasticity which makes the glaze adhere to the body. For this, only a small part of the elements should be fritted, and the rest should be added by simple mixture. The intensity of the color is based, not only on the quantity of coloring matter, but also on the proportion of chalk which it contains, the latter varying more or less according to the fusibility given to the glaze by the oxide.

The fritting of colored glazes, cannot be done in the kiln, as was the case with colored pastes, because it must be watched, and the fusion stopped or continued, according to circumstances. Frits are made in a special kiln.

This kiln is a blast kiln (Fig. A), communicating with the chimney of the regular kiln, so as to get the advantage of its

intense draft. The kiln is vertical and cylindrical, entirely constructed with fire bricks D and contains a fire clay cylinder E open at both ends. The upper part is closed with a fire clay plaque F with iron bands and a handle to allow of easy lifting. The lower part rests on square iron bars, about $1\frac{1}{4}$ inch apart,



to give free passage to ashes and air. These bars rest themselves on two cross bars fixed in the wall K. The bars of the grate can easily be removed to clean the kiln. (Fig. B). The ash receiver L, formed by the space below the bars, is wide open in front. The fuel is coke which is placed around the fire clay crucible O. The top of the kiln communicates with the chimney through an oblique opening M made through the thickness of the wall. It is easy to watch the fusion of glazes by lifting up the cover P of the crucible with flat pincers.

The number and size of crucibles determine the size of the kiln. The one which I use is 18 inches high by 10 inches inside diameter. I use crucibles No. 20 which are 14 inches high and $6\frac{1}{2}$ wide and make it possible to melt 20 pounds of material. The crucible is placed on a fire clay plaque which holds it in the center of the fire mouth. This kiln is very economical.*

All the following preparations for colored glazes should be thoroughly mixed.:

Blue:

Quartz sand of Nemours	30.5	} strictly oxidising.
Dry clayey kaolin	20	
Ordinary washed chalk	24	
Grand feu blue frit, as below	30	
Frit: Dry and pure cobalt oxide	20	
Feldspar in flour	80	

Brown:

Sand	30.5	} oxidising
Dry clayey kaolin	20	
Chalk	19	
Scale brown grand feu frit, as below	33	

*In this country, where oil is a cheap fuel, the little test furnace made by H. J. Caulkins & Co., of Detroit, Mich., will be found very useful and economical for crucible work. It can either be used for fritting, or by the insertion of a small muffle, can be transformed into a small kiln for tests and experiments on porcelain. The gas furnaces of the Buffalo Dental Mfg. Co. are also suitable for fritting.

Frit: Manganese oxide	15
Calcined umber	20
Feldspar in flour	65

Black:

Sand	30,5	} oxidising
Dry clayey kaolin	20	
Chalk	24	
Grand feu blue	6,5	
Frit as below	25,5	

Frit: Feldspar in flour	30
Chromate of iron	6
Chromate of cobalt	3
Cobalt oxide	3

Yellow:

Sand	30,5	} oxidising
Dry clayey kaolin	20	
Chalk	22	
Frit as below	20	

Frit: Feldspar in flour	30
Nitrate of uranium	8

Pink:

Sand	30,5	} oxidising
PN paste	47	
Chalk	24	
Tin pink as below	7	

Tin pink: Tin oxide	100
Chalk	34
Bichromate of potash	3,5

The preparation of this tin pink presents difficulties. It should be mixed by pouring the dissolved bichromate over the tin oxide and chalk, then the mixture should be strongly calcined, and washed until the water is colorless.

Blue celadon:

Sand	30,5	} very oxidising on account of copper.
Dry clayey kaolin	20	
Chalk	24	
Frit as below	29,5	

Frit: Feldspar in flour	30
Copper oxide	1,5
Tin oxide	2,7
Iron oxide	0,3

Grey celadon:

Sand	30,5	} very oxidising on account of copper.
Dry clayey kaolin	20,5	
Chalk	24	
Frit as below	38	

Frit: Feldspar in flour	30
Copper oxide	4,9
Tin oxide	8,2
Iron oxide	0,9

All the above glazes have been created for oxidising fire and fire between the fall of cone 9 and bending of cone 10. Having been prepared for porcelain, they do not give good results on gres.

The following series of colored glazes will suit grès, having been created at Sèvres for the coloration of the large grès frieze which adorns the facade of the Grand Palais, on Avenue d'Antin. The body exerting a great influence over the glaze, a special palette had to be created for the execution of this frieze.

The substances which enter into the composition of these glazes do not require the slow and troublesome work of fritting, as they are simply mixed. All the following formulae belong to the manufactory of Sèvres, and are of easy execution:

Colorless glaze for gres:

Is made by mixing and grinding together in water, the following substances, which can be bought from Mess. Plouenc Freres, Paris, and which must be as thoroughly pulverised as possible:

Feldspar from the Pyrenees	42,1
Quartz sand of Nemours	27,2
Dry clayey kaolin of Limoges	13,0
Chalk from Bougival	17,7

The Nemours sand is nearly pure silica, and the kaolin which enters into this composition is an hydrated silicate of alumina.

Like the other glazes, these grès glazes are applied either on raw or baked ware, after having been diluted in water thickened with a little gum tragacanth.

Cobalt blue for gres:

Cobalt oxide	3,0	} oxidising
Bougival chalk	14,1	
Feldspar from the Pyrenees	42,1	
Quartz sand of Nemours	27,2	
Dry clayey kaolin of Limoges	13,0	

Manganese violet brown for gres:

Manganese brown oxide	5,0	} oxidising
Chalk	13,0	
Feldspar	45,0	
Quartz sand	28,5	
Dry clayey kaolin	11,0	

Nickel reddish brown for gres:

Carbonate of nickel	3,0	} oxidising
Chalk	15,3	
Feldspar	42,1	
Quartz sand	27,2	
Dry clayey kaolin	13,0	

Uranium yellow for gres:

Uranium oxide from the calcination of uranate of ammonia (a very important point)	5,0	} oxidising
Chalk	17,7	
Feldspar	42,1	
Quartz sand	29,3	
Dry clayey kaolin	8,5	

Iron yellow brown for gres:

Pure red oxide of iron	5,0	} oxidising
Chalk	13,0	
Feldspar	45,0	
Quartz sand	28,5	
Dry clayey kaolin	11,0	

Chrome green for gres:

Green chrome oxide	1,0	} oxidising
Chalk	17,7	
Feldspar	42,1	
Quartz sand	28,0	
Dry clayey kaolin	11,3	

Copper green for gres:

Copper oxide	4,0	} oxidising
Chalk	12,7	
Feldspar	42,1	
Quartz sand	27,2	
Dry clayey kaolin	13,0	

By simple mixture of these fundamental colors, it is easy to obtain an unlimited range of tones, and to thin them with colorless glaze to bring them to the desired shade. For instance a *flesh tone* will be obtained by the mixture of

Manganese glaze	50
Colorless glaze	50

a *violet grey* by the mixture of

Nickel glaze	10
Cobalt glaze	3
Colorless glaze	87

a *blueish green* by the mixture of

Chrome glaze	30
Cobalt glaze	3
Colorless glaze	67

a *golden brown* by the mixture of

Manganese glaze	50
Iron glaze	50

These few examples show what an artist fond of experimenting may do with these glazes made each from one oxide, but which can be combined ad infinitum.

The grès colored glazes must be fired in an oxidising atmosphere to keep the quality of their tones.

Flammés or Flambes

This name is given to glazes which derive their coloring power from copper and iron, and which during firing, are submitted to the constantly changing influence of the flames which whirl in the kiln. After firing they present variable effects, according to the more or less oxidising or reducing action of the flames, also to the pyrochemical combinations which the various elements of these glazes produce together. It is easy to understand that at the high temperature at which these combinations are formed, it requires the greatest care to avoid the oxidising of a metal as sensitive as copper, which is turned green by an oxidising action lasting a few hours. Hence the unlimited variety of flammés.

I have told in the article on firing how to obtain a reducing atmosphere at will.

The red cuprous glaze is prepared in a special way because it contains substances which are soluble in water. The matters which compose it must be combined in the crucible.

The following should be thoroughly mixed and fused:

Pegmatite (feldspar)	108,0	} strictly reducing
Quartz sand of Fontainebleau	126,0	
Zinc oxide	15,5	
Carbonate of baryum	36,0	
Fused borax	45,0	
Dry carbonate of sodium	16,5	

After fusion, the glass thus obtained is pulverised and colored as follows:

Ground glass	10,000
Oxalate of copper	1,200
Calcined tin oxide	1,100

This new mixture is carefully ground so as to form a homogeneous mass, and the glaze is applied, quite thick, on the raw ware, with the brush and gum tragacanth.

Whatever the care given to the preparation of this erratic glaze and to its firing, it is difficult and very rare to obtain pieces identical in tone, even when they closely resemble each other. However Chaplet has shown me two flammés which were absolutely identical on their four faces, although each of these faces was of a different tone. I must add, however, that these two pieces were only 2½ inches high and had been fired side by side in the same sagger.

But if flammés can give a succession of deceptions, they also give a succession of unexpected and fascinating results.

Reds of copper will develop on both bodies, grès and porcelain. I have obtained them on both, but flammé red porcelains possess a brilliancy and freshness which is given them by the underlying material and makes them superior to flammé red grès.

Among flammés are the celadons of iron. These are produced by the introduction into the glaze of 1 to 3% iron



Panel in kaolinic grès by Taxile Doat, purchased by the French Government for the Musée du Luxembourg. Subject: Venus. Figure and small flowers in white pâte sur pâte on green ground. Decoration of small squares in mat and bright yellow. Cartouche and columbines in mat pale blue speckled with rust.

oxide. Just as for the reds of copper, a strictly reducing atmosphere is necessary and saggars must have spaces free from lute (Fig. 81) to allow the flame free access into them. The greatest part of the old Chinese and Korean celadons were thus obtained with iron. These celadons are finer on grès than porcelain, especially when the glaze is calcareous.

Here is the formula of flammé celadon of iron, which resembles the Korean celadon and may be seen on some of my grès vases:

Sand	33,35	} to be strongly fritted.
Chalk	19,70	
Feldspar in flour	26,30	
Clayey kaolin	8,60	
Red ochre of Burgundy	12,00	

Flowing Glazes

The use of borax in flammés has led the Sèvres chemists to study the combinations of this substance with other oxides and its influence upon their development. By superimposing a boracic glaze over a colored glaze, one obtains this curious series of marbled effects, the shade of which varies with the glazes used, while the greater fusibility of the boracic glaze provokes the flowing and sliding of both, so that they mix their colors in the most unexpected and harmonious way.

The use of this process of decoration requires much practice in the disposition in spots or clouds of the boracic glaze over

the ordinary glaze, also in the thickness which must be given to obtain artistic and pleasing effects.

The fire does not act here as in the case of flammés. It only determines the flowing of boracic glazes and the results will be to a great extent unexpected, according to the time of firing and the variable thickness of the color.

First, one or many colored glazes should be applied on the raw ware, as evenly as possible. When the piece is thoroughly dry, a coat of boracic glaze is applied over the colored glaze, its thickness depending on the kind of effect which is looked for.

Interesting results may also be had by applying a thin coat of boracic glaze between two strong coats of colored glazes of a different nature. These glazes do not give as good results on grès as on porcelain.

For boracic glazes, as for flammé reds, it is necessary to place the vases on high columns, and to wash these thoroughly with the infusible wash [50% calcined alumina, 50% washed kaolin (ball clay)]. As for reds also the vase must be thick, so as to avoid cracks, which, during firing, might be provoked by the thickness of glaze, the latter forming a kind of cuirass on the vase.

The preparation of boracic glazes is made by means of a flux to which, in a second fusion, are added the coloring oxides. Here is the formula of this flux:

Feldspar in flour	40
Sand	40
Borate of sodium, fused and pulverised	12
Chalk	18

This flux being the key to these very simple combinations, it is unnecessary to give them in detail. Each person will mix with it, to suit his fancy, coloring oxides in the proportion of 2 to 4%, and then will frit the mixture mildly.

Coloring oxides which give the richest effects are copper, manganese and cobalt. The most successful superimpositions are boracic glazes with copper or manganese over the black or the brown glaze; or boracic glaze with cobalt over the yellow or the pink glaze. The boracic glazes which I use on my pieces contain 4% of coloring matter. These flowing glazes develop in an oxidising atmosphere.



CONVENTIONALIZED FROM JACK-IN-THE-PULPIT—HANNAH B. OVERBECK

SHOP NOTE

We are just in receipt of a circular of F. Weber & Co., of Philadelphia, announcing the introduction of a new small oil kiln for overglaze decoration.



STUDY OF GOLDEN ROD—MARGARET OVERBECK

CHRISTENING PRESENTS

The youngest generation of to-day shares the advantages with the elder of the great improvements which have been made in the realms of applied art.

Instead of the ugly silver christening mug of the 70's, the most graceful cups and vases are given. The Guild of Handicraft is often called upon to execute customers' own designs. A favorite pattern is the tall, simply curved cup, studded with carbuncles, cornelians, chrysoprases and generally has the infant recipient's name engraved just below the edge.—*From the London Daily Mail.*



For many years M. Herbert of Paris interested himself in forming a collection of ancient mustard pots, and he succeeded in obtaining a unique series of all shapes and sizes in old Sèvres, Dresden and other porcelains. M. Hébert recently died, and Mr. Fitz-Henry bought the collection from M. Hébert's brother for presentation to the Louvre. These mustard pots will find a permanent resting place in the room now occupied by the exhibition of the French Primitives.—*Boston Transcript.*



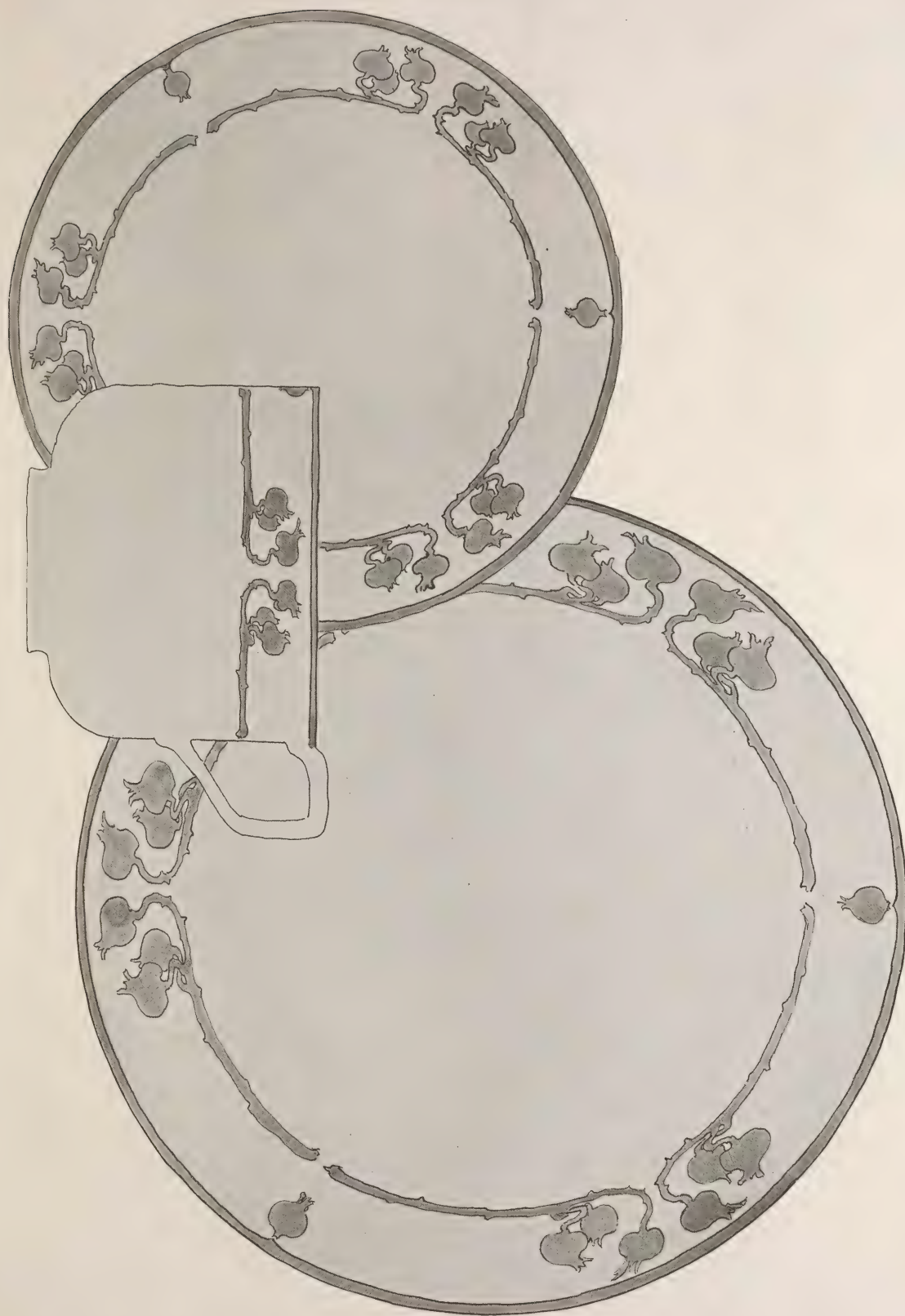
STUDY OF GOLDEN ROD—HANNAH OVERBECK



PLATE—MARIE CRILLEY WILSON

AUGUST 1904
SUPPLEMENT TO
KERAMIC STUDIO

COPYRIGHT 1904
KERAMIC STUDIO PUB. CO.
SYRACUSE, N. Y.



CUP, SAUCER AND PLATE—MARGARET OVERBECK

Ground of border grey green; design in yellow brown outlined in a darker shade or in gold.



•OLEANDER•

DECORATIVE STUDY OF OLEANDER—EDITH ALMA ROSS

Flower, a creamy pink; leaves, grey green; ground, violet grey.



APPLICATION OF OLEANDER TO CERAMIC FORM—EDITH ALMA ROSS

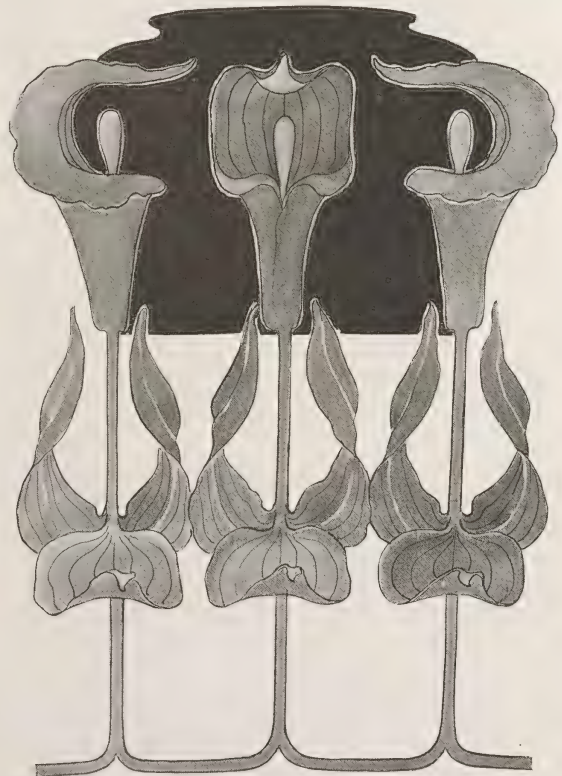
Design in blue and white.



VASE

Edith Alma Ross

THE vase is adapted from the oleander and is to be executed in three shades of green, the dark one very dark. Outlines are in gold.



VASE—JACK-IN-THE-PULPIT—HENRIETTA BARCLAY PAIST



JONQUILS

Mrs. J. F. Bernies

FLOWERS, pale yellow in high light, deeper yellow in ordinary light and shaded with green and brownish green according to depth of shadow. Leaves, blueish green, very light in high lights. Background may be soft green tones or grey.



RARE ART DISCOVERIES

THE collection of ceramics in the museum of Fine Arts has been enriched with several examples of the pottery lately discovered at Rakka in the vilayet of Aleppo, a district along the western border of ancient Mesopotamia. The vases

and fragments brought to light in the excavations are presumed to belong to a period extending from the days of Darius and Cambyses, who invaded Egypt, to those of the great prophet Mahomet and even later.

The importance of these examples becomes all the more apparent from the fact that they illustrate the evolution of Persian ceramic art from its rudimentary stages to that which flourished under the Ottoman empire. From the information so far obtainable it appears that the earliest object in the collection is the small iridescent pitcher from M. Dikran Kelekian and that to the same period belong the flat iridescent plate—lent anonymously—a large whitish vase and a beautiful ovoid vase resembling in color certain Chinese celadons, also the mulberry purple and iridescent pitcher of the collection. The turquoise bowl, the fine warped white and blue bowl and most of the fragments would, it is supposed, fall well within the fifth to the tenth century of our era. These very well illustrate the ceramic art of Islam.

On the upper shelf of case 20 are some fanciful examples of the work of the Ming potters. These clay modelings of fruits and flowers reflect a mode of treatment which gave way before the ostentation of the Manchurian dynasty, and has never since reappeared in the art of China. As a further evidence of still earlier refinements may be pointed out the delicate white plates that are attributed under the name of Sung, to that dynasty of the 11th and 12th centuries, and which bear designs in a slight relief or intaglio of a character connected almost wholly with Indian ornament.

In case 21 are nine Chinese vases of periods which antedate the present Manchurian dynasty. One shows the transparent green glaze of the Ming, one a grey-green of the Sung, and one—on a large scale—the splendid blue and white enamel of a Ming brush.—*Boston Evening Globe.*



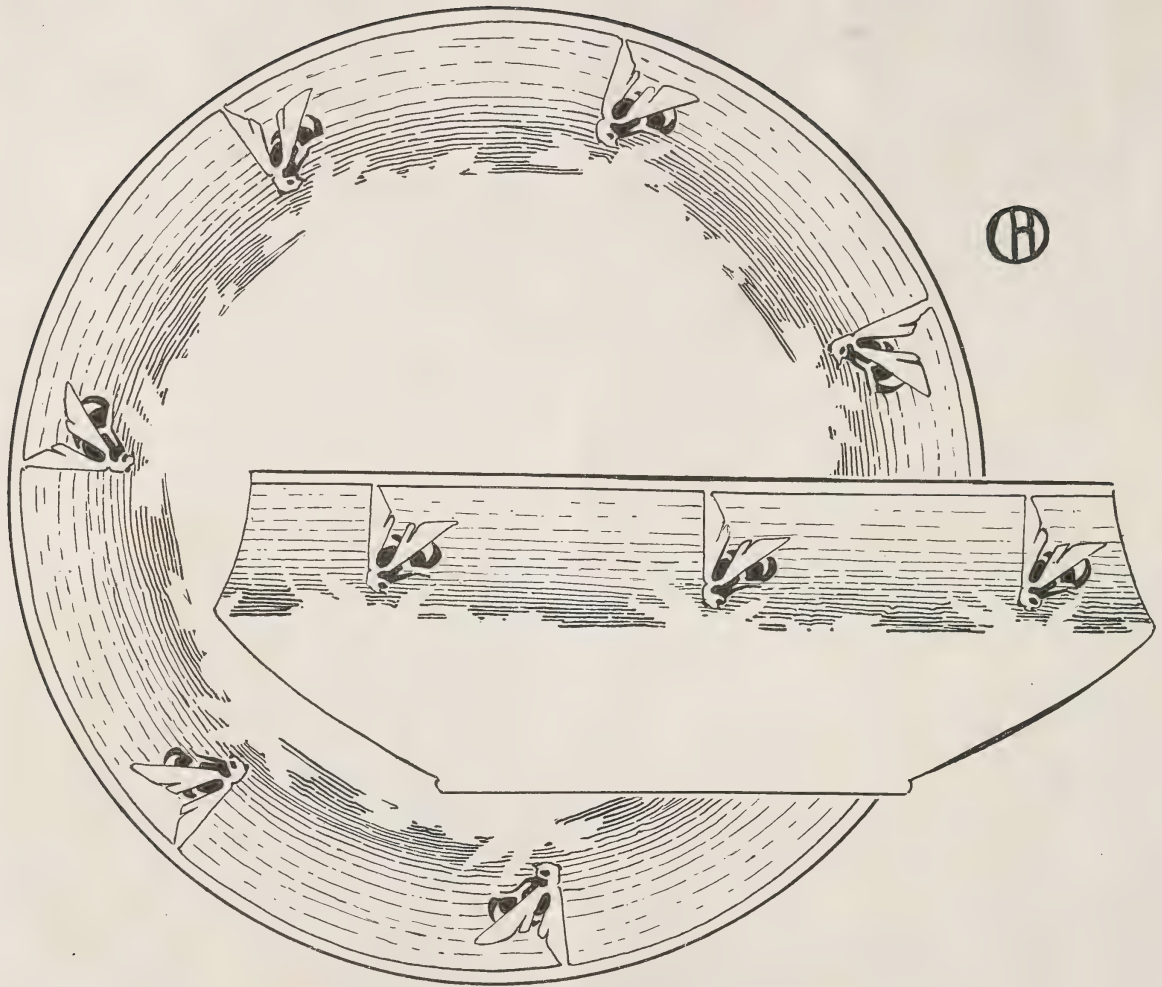


Dock



Red Clover

BLUE PRINT STUDIES—LETA HORLOCKER



BEE DESIGN—AUSTIN ROSSER

THE band of color is a soft grey blue which deepens to a darker tone just tinged with purple against the flower forms. These should need no outline. The bodies of bees are

done in hard black, outlines are of gold, wings and narrow band above color are white. Or black may be omitted, using gold for bodies as well as outlines.



CHILD'S BREAD AND MILK SET

Austin Rosser

THE band of color shades from a light slightly greyish blue to a deeper tone, just tinged with purple. The white flowers should stand out sufficiently against this without outlines.

Leave the narrow outer band and the wings of bees white, make bodies dull black, outline with gold. The blacks may be omitted entirely, using gold for bodies.



CHINA FORGERIES

A NUMBER of forgeries of famous makes of china and pottery have recently been discovered in the large collection of ceramics at the Pennsylvania Museum, in Memorial Hall, Fairmount Park.

Dr. Edwin Atlee Barber, curator of the museum, has in hand the preparation of a case of such forgeries, copies and reproductions, to be part of the permanent exhibit of the museum for purposes of comparison. All of the examples of pottery in this case will be selected from the present exhibits, from which the fraudulent matter is being weeded out.

In nearly every large collection of pottery and porcelain reproductions and forgeries of well-known manufacturers will be found.

In the case of the frauds in the collection at Memorial Hall, they have come into the museum as bequests, for the most part, along with extremely rare and valuable material.

One of the grossest cases of forgery in the museum discovered by Mr. Barber is a set of pale blue and white porcelain, decorated with heads of famous beauties and fops of France of the period of the Restoration. This porcelain was made of hard paste between 1830 and 1850. It bears, however, the mark of the old soft paste porcelain of Sèvres, made only prior to 1770. The cost price of this set doubtless did not exceed \$20. Yet under the guise of the genuine it brought upwards of \$500.

A cup and saucer in clever imitation of the old French soft paste porcelain made prior to 1770 is palpably not more than 20 years old. It is really of modern French soft paste. It bears the jewel decoration, and the forged date of 1771. Decorations of the kind were not made at Sèvres, however,

until about 1780. This makes an anachronism of only nine years, and yet it is sufficient to give the lie to the transaction, and set the expert thinking.

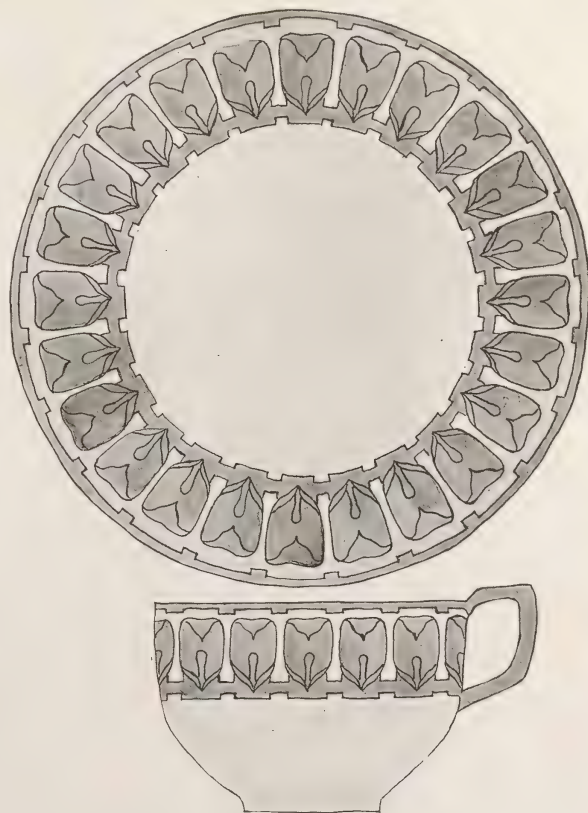
In an open-work plate purporting to be Dresden, the mark is a palpable forgery. The plate is seen at once to be modern French hard paste porcelain.

There is a handsome coffee pot of French make also made in imitation of Dresden china.

There is a third plate in imitation of Dresden which is really French hard paste porcelain of a late date. Here the ignorant forger has marked it with the insignia of old Sèvres soft paste and dated it 1765.

Modern Majolica ware is made after the old patterns of the sixteenth, seventeenth and eighteenth centuries, but so well copied that it puzzles the expert.

Perhaps the most profitable china to forge is the Old English, decorated in dark blue with American views. Originals of this style are rare and extremely valuable, but there is a factory in Baltimore to which some of these prized heirlooms may be traced. They are disposed of a few at a time, the chief market being at sales of old china. The genuine "Anti-slavery" plate is especially rare, yet the obliging Baltimorean will furnish two to any one who has the price, at a moment's notice.



CONVENTIONALIZED FROM JACK-IN-THE-PULPIT—HANNAH B. OVERBECK



CONVENTIONAL DESIGN FOR BOWL—NELLIE Y. HAMILTON

DESIGN FOR BOWL

Nellie Y. Hamilton

THE design, which is a conventionalized Jack-in-the-Pulpit, can be carried out in blue and white, or in two shades of green lustre leaving the white places for gold or making them orange lustre and outlining with black.

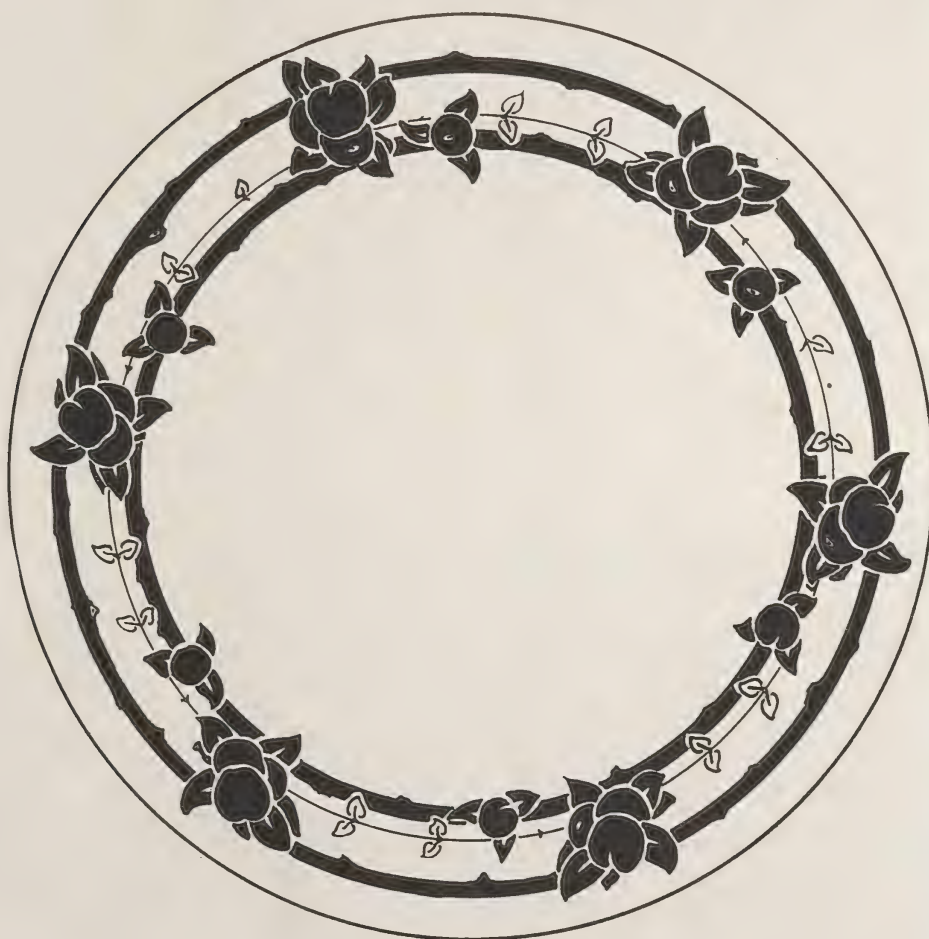
STUDIO NOTES

William Watts Taylor, manager of the Rookwood pottery, has just received a degree as Master of Arts conferred by Har-

vard College. The degree is conferred on him as a "sympathetic and successful promoter of a highly artistic craft and manager of Rookwood pottery, the best American contribution to ceramic art."

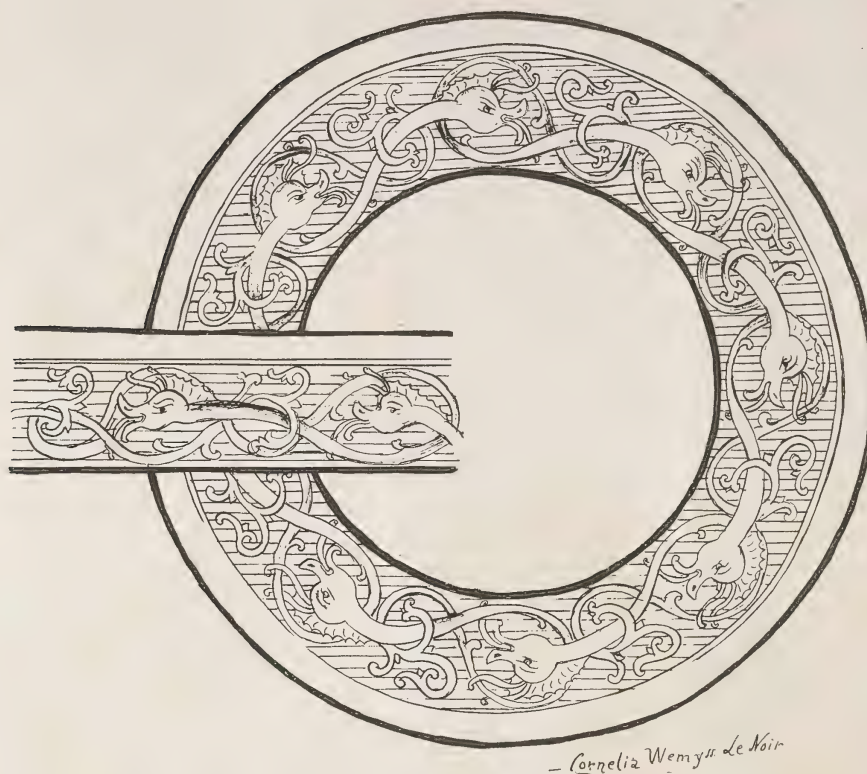
The International Studio announces a new department devoted to notes on crafts in the United States.

Novel tea sets in Royal Doulton are circled with galloping huntsmen done in gay colors. Others are decorated with men and women dressed in the picturesque costumes of the days of George IV.



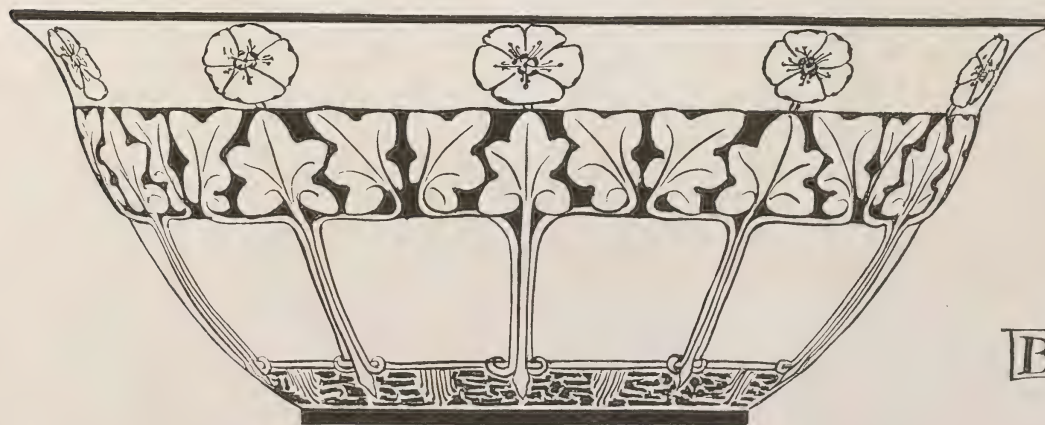
PLATE—RUSSELL GOODWIN

Design in gold outlined in black or red.



CUP AND SAUCER DESIGN—CORNELIA WEMYSS LE NOIR

Background, Pale Violet of Gold; dolphins, shades of Blue and Green; bands, Blue, Green and Gold. Could be carried out in lustres effectively as well.



BOWL—BEATRICE BROOKS

Design in yellow brown lustre on white with gold outlines.

THE CRAFTS

WOOD CARVING AND PYROGRAPHY. LEATHER AND METAL. BASKETRY, ETC.

Under the management of Miss Emily Peacock, summer address, 4477 Western Ave., Westmount, Montreal, Can. All inquiries in regard to the various Crafts are to be sent to the above address, but will be answered in the magazine under this head.

THE STENCIL

Clifton Windsor White

THE first thing to be considered in a stencil is the design. A successful stencil, at least from a decorative standpoint, must be pleasing in line, well balanced, and with a good disposition of large and small spaces. It must be remembered that a design will always appear weaker when applied than it does in the cut stencil, and this must be allowed for in the drawing.

Have as few partly detached pieces in your design as possible and always make the necessary supports follow the general line in your composition, trying to have them, as far as is practical, really a part of your design.

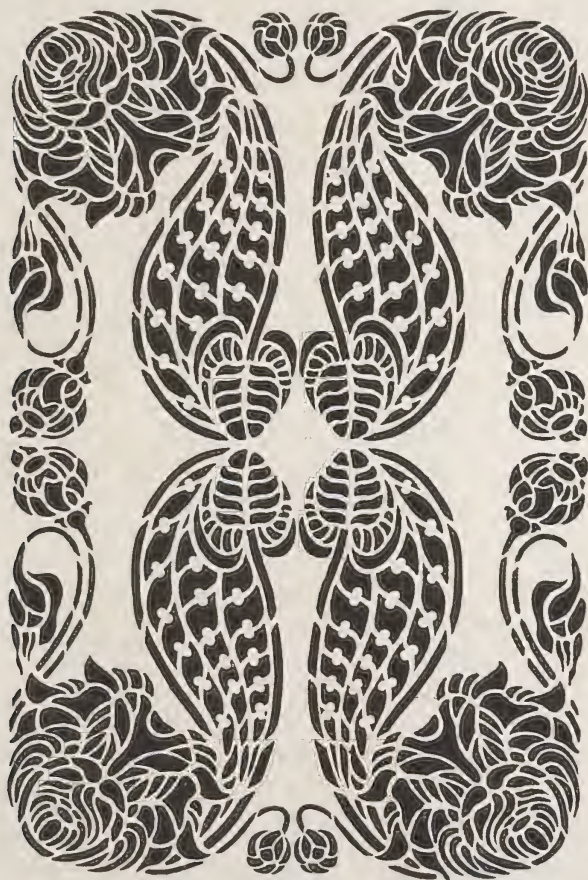
color (as Fig. 2), which simplifies the execution, but with a little extra care excellent results can be obtained with the one stencil, using as great a variety of colors as desired. The



No. 2. Showing how a separate stencil may be cut for each color.

heavy stencil paper which is sold by the yard, is the best material to use for this work, although for small designs heavy manilla or duplex paper may be used. This paper should be securely tacked to a board, and the design traced or drawn upon it. As the stencil is easily damaged, it is well to trace and keep the original drawing for reference.

After the design is traced on the paper fill a brush with linseed oil, and cover the surface with it, using as little oil as possible. When the paper has thoroughly absorbed the oil, you may begin the cutting, although the paper is more easily cut after oiling, the knife is apt to slip, and great care must be exercised. A regular stencil knife is perhaps the best, but any good blade that is firmly set in a smooth handle may be employed. Keep an oil-stone close at hand with a little oil to moisten it with, as the point of the knife needs almost constant sharpening. After the stencil is cut and the oil in it has dried, cover both sides of the stencil with a smooth coat of alcohol shellac, which will make the stencil more durable.



No. 1. Stenciled Chair Back.

Designs may be varied by relying on the background to form the pattern in one portion, and on the cut-out parts in another. The stenciled chair back (Fig. 1) for example. In the central portion of the design the white, which is in reality the background, gives the effect of being a pattern on a ground of black.

Some designs are made with a separate stencil for each



No. 3. Motive for a frieze.



No. 4. Corner of a table cover in grey green velour, stenciled in greenish gold.

When this surface is perfectly dry, the stencil will be ready for use. For example, if you have a frieze, an all-over pattern, or any decoration to apply to a wall, have the design repeated several times on your stencil, as it will greatly facilitate the work; tack it down as firmly as possible, to the wall, and steady with one hand while you stipple with the other. Use a stencil brush varying in size according to your design. Remove all superfluous moisture from your brush before starting to apply it to the surface. This rule appertains to stenciling on any fabric or surface, and is the only way to secure a clear edge to your design. Stenciling on velour and other materials is more difficult, and good technique is only possible from experiment and practice. For intricate designs small round bristle brushes will be found useful, particularly where several colors are to be employed on the one stencil. Oil color thinned with turpentine, fresco paint, transparent water color, dyes and all bronze powders mixed with gum arabic or any good mixing liquid can be used, but for silk, ooze leather, or any material where you want the surface quality to show through, the dyes are by far the best; for some fabrics a little gum arabic may sometimes be added to the dyes to prevent them from running, but this is not practical where it would spoil the brilliant lustre, as in velour, or when it would stiffen thin fabrics. Although a stenciled design should never have its edge destroyed, after removing the stencil, it is often found necessary to retouch some of the spaces and this may be done



No. 5. Stencil design for border.

without altering it in the least. To secure a rich surface of gold, especially on a fabric after the bronze is stippled on, take a fairly large sable or bristle brush and wash over each space with the gold mixture until you get the effect desired.

Besides the knife, a small steel punch is indispensable where numerous dots form part of the design, this method is frequently used by the Japanese who excel in the art of stencil washing. A study of the marvelously cut Japanese stencils will prove very helpful to anyone interested in this subject, and one little volume, called "Illustrations of the Art of the Japanese Stencil-cutter," by Andrew W. Tuer, F. S. A., contains some fine reproductions.

Stencils should never be rolled or folded. Tack them to a wall or better still, if they are not too large, place them in a flat box or drawer, keeping something heavy upon them.

All the illustrations of this article with the exception of frieze No. 6 were especially designed to be executed in three or more colors giving a very different appearance than where reproduced in a single tone. Numberless variations may be obtained from one stencil by varying the tones and colors in a design, so that the original interpretation could scarcely be recognized.



No. 6. Frieze stenciled in dull red on a background of lighter tone, with ceiling of the same lighter tone. Wall dull peacock blue and velour hangings of the same shade as the stencil.

CARVED FURNITURE

THOSE thousands of articles in carved mahogany turned out by the furniture factories and made to look like antiques are carved by machinery. The machine is one of the most ingenious, elaborate and expensive of modern inventions—so much so, indeed, that it can be used profitably only by those who turn out furniture wholesale.

Even the introduction of the machine has not been able to ruin the hand carvers, for the work of the machine must be followed by that of a skilled carver who shapes and smooths it until to the eye of the untaught it seems to be all handwork. So great has been the demand for carved furniture, indeed, that it is by no means certain that the introduction of the wood carving machine has not made more work for the hand carver.

Wood carvers in New York are chiefly Germans or men of German descent, Italians and a few skilled Frenchmen. Some men work in the factories as finishers, others work for the skilled cabinetmakers, and still others have little shops of their own where they employ a few men and boys and do perhaps the most delicate work themselves.

The best carvers earn \$4 or \$5 a day, but are seldom employed the year around. A few of much more than average skill get considerably higher wages. A man employed by the

year in a cabinet making shop may hope to earn from \$15 to \$16 a week.

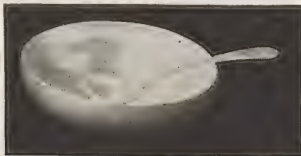
The little shops of the self-employing carvers are filled with men and boys at all sorts of wages. Some of the rougher work is done by boys who earn only \$4 or \$5 a week. A man who can follow copy and cut a true line may get three or four times as much.

The old French quarter used to have many such little shops, and a new one springs up every now and then in the German quarter. The cabinetmakers find it profitable to have some of their work done by the piece at such shops.

To the cabinetmaker piece work thus done is often cheaper than he can have it done in his own shop by his carvers regularly employed by the year or working at \$4 or \$5 a day. A single carved chair leg is sent along with a dozen legs in the rough to the little shop, and the whole dozen come back looking so like the model that only the cabinetmaker can tell model and copies apart.

The woodcarver's trade is still haunted by mediæval traditions, and the best men in the trade have a strong sense of its relation to the fine arts. There are a few carvers who are known to all the cabinetmakers of the town, and are sure of profitable employment the year round even in the dullest times. Some carvers are specialists in their art and known for their skill in doing the acanthus leaf or some other pattern or in handling rosewood or mahogany.

Perhaps the invention that the skilled carver most resents is the substitution in cheap furniture of pressed work for carved work. In some of the cheapest furniture the design is impressed directly upon the wood. In other cases papier maché designs, often of the most elaborate kind, are applied to the wood, securely glued to it and stained and polished in such fashion that only the skilled eye can distinguish the thing from genuine wood carving. Strangely enough, this false carving is really durable. It seldom separates from the wood unless long exposed to dampness and never, like even the best of genuine carving, cracks or chips.—*N. Y. Sun.*



SILVER SALT CELLAR

Mrs. K. W. Wright

THE very simple and beautiful salt cellar made by Mrs. K. W. Wright was of silver, 22 gauge. A piece three inches square was used and the same method of making as that for the tea strainer in July number, excepting that the centre of the bottom part was left flat, not beaten at all, and the upper edge was slightly turned over. The small spoon was made from the same gauge silver. As the salt cellar, it was cut out from a very exact design, and the bowl of the spoon made in a small hollow pattern in the same way as the tea strainer. See page 69 in July number.

WOOD SCREEN

Miss M. E. Dow

THE centre panels of this screen are made of cypress, the frame and carved panels of quartered oak. All the wood is colored a grey green with black and antique oak oil stain, afterwards finished with wax.



The metal trimmings are made of brass 22 gauge, they are cut out with a saw, and modeled slightly on heavy leather. These and the brass hinges are thoroughly cleaned, then dipped in a hot solution of sulphuric acid to color, and afterwards rubbed down, so that some of the metal shows through.

This metal decoration could be entirely omitted, and the centre panels covered with leather.



WOOD SCREEN

Laura Rogers Way

THE frame and carved panels of this screen are made of quartered oak and the centre panels are made of cypress. The screen stands five feet and four inches high and each fold is twenty inches wide. It is stained a warm reddish brown.

ANSWERS TO INQUIRIES

D. W.—If the metal is rusted dissolve about four inches of stick potash in a quart of warm water. If possible immerse the object for about five minutes, after which rinse in hot water until all the rust disappears.

F. G.—The Labradorite can be cut and polished for setting in jewelry, but it is not a very hard stone, so unsatisfactory for practical wear. A good Lapidary will cut any shaped stone for you, and polish the pebbles.

Glen.—If you will use a saturated solution of benzine instead of oil, you will get a lighter finish on your cabinet. It must be rubbed in well though and put on evenly.

Wood-work.—Wood carving and lacquer should be rubbed with fine cotton upon which a little siccative and linseed oil has been placed. Afterwards polish with clean, fine, soft silk.

Miss Smith—DeVoe's Antique oak oil stain is the best for coloring wood, mix this with a little black to make a grey green. The surplus stain must be thoroughly rubbed off, then wax and allow the wax to remain on a few days before rubbing off.

A novel threefold mirror, designed by Miss Evelyn Hickman, is now on show at the Bradford Exhibition of Art. These folding mirrors have always been made to hang on the wall; and it is quite a new idea to have them mounted on a stand. The mirror is in copper, with rich blue lapis-lazuli balls at certain points. Seaweed suggested all the designs for the tracery of the mirror supports, which are beautifully carved

and pierced by the designer. The panels on the backs of the folding doors have the figures of mermaids repoussé on them. Right in the centre, between the candle brackets on either side, is a shield to bear the initials of the owner.



ANSWERS TO CORRESPONDENTS.

A. J. M.—The KERAMIC STUDIO has published a half tone study of corn and treatment by Mrs. Sadie Wood Safford, but we do not know where you can find the wheat study. The KERAMIC STUDIO has also a half tone study of morning glories with treatment.

E. P.—Mat wax colors are dusted in the same manner as ordinary colors. Some lustres can be used with good effect over fired color if the latter is not put on too heavily. We doubt if you would succeed in getting a good effect by using red lustre over mat black—better try on a broken bit of china first.

E. D.—We do not know of any book on enamel decoration but will gladly give any information possible in these columns. The Aufsetzweis or hard enamel can safely be fired twice, sometimes more, but the soft or ready colored enamels are better fired once only, though occasionally they are found to stand two fires if the china is of a soft paste. We do not quite understand your question in regard to chimney connection of your kiln. The kiln pipe can go into any chimney even if used by furnace or stove, but in firing kiln the damper in furnace or stovepipe should be turned to shut them partly off or their fire will burn out too rapidly. When not in use the damper in kiln pipe should be closed so as not to interfere with draft of furnace or stove.



PLATE—A. B. SHARRARD

Cream flowers on grey ground; or all forms in Copenhagen Blue.

KEEP THE FIRE ALIVE

KERAMIC STUDIO

CONTRIBUTORS

MRS. K. E. CHERRY	✂	✂	✂	✂	✂
MR. TAXILE DOAT	✂	✂	✂	✂	✂
MR. RANDOLPH I. GEARE	✂	✂	✂	✂	✂
MISS JENNIE HANSON	✂	✂	✂	✂	✂
MISS LETA HORLOCKER	✂	✂	✂	✂	✂
MISS MARY E. MASON	✂	✂	✂	✂	✂
MISS HANNAH B. OVERBECK	✂	✂	✂	✂	✂
MISS EMILY F. PEACOCK	✂	✂	✂	✂	✂
MRS. ALSOP-ROBINEAU	✂	✂	✂	✂	✂
MISS AUSTIN ROSSER	✂	✂	✂	✂	✂
MISS ALICE B. SHARRARD	✂	✂	✂	✂	✂
MISS MARY C. THOMAS	✂	✂	✂	✂	✂
MISS MADGE E. WEINLAND	✂	✂	✂	✂	✂
MRS. C. L. WILLIAMS	✂	✂	✂	✂	✂
MISS CARRIE E. WILLIAMS	✂	✂	✂	✂	✂

SEPT. MCMIV

Price 35c.

Yearly Subscription \$3.50

A MONTHLY MAGAZINE FOR THE POTTER AND DECORATOR

[The entire contents of this Magazine are covered by the general copyright, and the articles must not be reprinted without special permission.]

CONTENTS FOR SEPTEMBER 1904

	PAGE
Editorial	97
Brush Work	W. P. Jervis and H. P. Rhead 97-98
National League	99
Grand Feu Ceramics—XIV	Taxile Doat 100-101
Sunflower	Mrs. C. E. Cherry 102
Buttercup Design	Alice B. Sharrard 103
Trillium	Mrs. Adelaide Alsop Robineau 104-108
Child's Bread and Milk Set	Austin Rosser 108
Decorative Study of Trillium	Hannah Overbeck 109
Fiji Pottery	Randolph I. Geare 110-111
High Bush Cranberry	Mrs. C. L. Williams 112-113
Trillium Erectum	Jennie Hanson 113
Honeysuckle	Mary C. Thomas 114
Tea Tile	Mary E. Mason 115
The Crafts—Some Work in Raffia	Madge E. Weinland 116-117
Two Wood Chests and a Wall Cabinet	Miss Robinson, Miss Todd, Miss Budd 117-118
Tea Caddy	Emily F. Peacock 118
The Primitive Arts Club	118-119
Answers to Correspondents	119

Some Leading Agencies of Ceramic Studio

We take pleasure in mentioning a few of the leading agencies for the sale of the KERAMIC STUDIO, where, also, subscriptions may be placed:

Boston, Mass.—Miss E. E. Page, 286 Boylston St.; Smith & McCance, Old Corner Book Store.
 Brooklyn—A. D. Mathews & Sons, Fulton Street.
 Buffalo—Mrs. Filkins, 609 Main Street.
 Chicago—A. C. McClurg & Co., Brentano's; Burley & Co.;
 Cincinnati—Miss M. Owen, 245 Elm Street; A. B. Closson, 4th Street near Race; Traxel & Mass, 4th Street, near Elm.
 Cleveland, Ohio—Vinson & Korner, 150 Euclid Ave.
 Columbus, Ohio—Lee Roessler, 116 So. High Street.
 Dayton, Ohio—W. W. Kile & Co.
 Denver, Colo.—E. Meininger, 807 16th Street.
 Detroit, Mich.—L. B. King & Co.
 Hartford, Ct.—E. M. Sill.
 Grand Rapids, Mich.—Miller, Wolfe Co.
 Indianapolis, Ind.—Keramic Supply Co., Lemcke Building.
 Kansas City, Mo.—Emery, Bird, Thayer Co., Geo. B. Peck Co.
 Louisville—Louisville Book Store.
 Minneapolis, Minn.—Minn. Art China Co., 607 1st Ave. So.

New York City—Brentano's, Union Square; M. T. Wynne's, 11 E. 20th St.; The Fry Art Co., 36 W. 24th St.; Wanamaker's; American News Co. J. B. Ketcham, 107 W. 25th Street; M. J. Whaley, 430 5th Ave.
 Newark, N. J.—Keramic Novelty Co.
 Oakland, Cal.—Smith Bros.
 Omaha, Neb.—Megeath Stationery Co.
 Philadelphia—Wanamaker's.
 Pittsburgh, Pa.—Otto Schaffer & Bros.; Kurtz, Langbein & Schwartz; R. S. Davis & Co., 346 Fifth Ave.; John G. Yergan, 36 Fifth Street.
 Reading, Pa.—Rowland's Book Store.
 Saratoga Springs—Robson & Adea.
 San Francisco—Mrs. M. E. Perley, 207 Post Street.
 Sioux City, Ia.—J. K. Prugh, 312 Nebraska Street.
 St. Louis—F. Weber & Co.; A. S. Aloe & Co.
 Syracuse—Wolcott Book Shop; Welch & Hollingsworth; W. Y. Foote; A. L. Varney & Co., 336 S. Salina Street.
 Tacoma, Wash.—Art Exchange, Mrs. Mead.
 Toronto—The Art Metropole.
 Warren, Pa.—Alzora Bashline.
 Washington, D. C.—Woodward & Lothrop.

The Magazine may also be ordered from any news dealer or book store in this country, who can procure it through the American News Company New York, or its branches.

KERAMIC STUDIO

Vol. VI, No. 5

SYRACUSE NEW YORK

September 1904

THE "ALLENDALE ARTS AND CRAFTS"



We are in receipt of a charming little blue print booklet on the above subject, printed by "Old Sol," every now and then at the Allendale farm. "Old Sol" is assisted by the boys who are taught all sorts of crafts from photography to the working of wood, metal and the developing of useful Christian men out of boys who otherwise might have hard work to be other than flotsam and jetsam of the city. We append some extracts from "The Blue Print" which will explain the Allendale Farm and we hope to enlist the sympathetic aid of those who are interested in the saving of boys and the future manhood of the country.

"The Allendale Association,"

L. Everett Thompson, Sec.,

1007 Tacoma Building, Chicago, Ill.

Director, Edw. L. BRADLEY,

Allendale Farm,

Lake Villa, Ill.

"The men and women who are lifting the world upward and onward are those who encourage more than they criticize."—*Elizabeth Harrison.*

Allendale Farm is a community of boys, *not* a reformatory—neither is it a charitable institution, in the general acceptance of that term. The work is principally for the benefit of self respecting boys who need our help.

The community is now divided into five groups or families of from eight to fifteen boys. Each family has its Cottage Home presided over by a mother or a father who has in charge the home life of the boys—the community is organized as a junior municipality.

We need only 1,500 friends, children and grown-ups who will contribute \$500 a year to guarantee our running expenses. Allendale is dependent for its support upon the free will offerings of those who believe that "an ounce of preventive is worth a pound of cure."

"It is hard to feel at home with people who never make mistakes."

Allendale is not an institution. It is the paternal home of the homeless and neglected child who is received into sonship—not viewed as "a case."

\$900.00 is needed for water tower, tank and power.

The doctrine of total depravity will have much to account for in the day of judgment. We know that the child is good if he has a chance—an environment of goodness. Children long for something to do, and they love right doing far more than they love wrong doing.—*F. W. Parker.*

There are great possibilities for work in the various crafts at Allendale; such as simple bookbinding, leather carving and pottery, and we hope, in time, to open up work along those lines, this year the boys have worked only in wood and sheet metal—the following is a list of articles made and sold by our boys, write for price list:

"Oak and copper sconces, brass and copper candlesticks, pin trays, ash trays, card receivers, envelope and letter holders, lamp shades and decorative salvers."

A correspondent writes, "There are acres and acres of pottery and porcelain at the St. Louis Exposition—and some of the best is the work of women potters."

Beginning with the November issue or the December at the latest we will begin a series of illustrated articles on the pottery and porcelain at St. Louis, both native and foreign, which we hope to make not only interesting and covering well the entire field of artistic ceramics at St. Louis, but instructive and inspiring as well and especially to our women workers. The list of women potters is growing and adding lustre daily to ceramic art—Miss McLaughlin, Mrs. Frackleton, Mrs. Irelan, Miss Perkins, Mrs. Poillon, Miss Perry, Mrs. Robineau, are names that make no mean list for an art, young in America, and the prominence that some of these names are gaining, not only at home but abroad, should be a most exhilarating knowledge for the thousands of women enthusiastically and sincerely working in ceramics.

+

Many china decorators have felt somewhat shy of taking up a course in design such as the one by Mr. Hugo Froehlich just finished in *KERAMIC STUDIO*, under the plea that, while they appreciate the value and need of such a course, they can not afford to put so much time on work not immediately applicable to the china itself. The article on the Trillium by Mrs. Robineau in this number will remove this objection by showing how each problem may be worked out and immediately utilized in a design for china. She finds that there is not a single problem, after the general principles of spacing are mastered, which may not be applied directly to the work in hand.

✦ ✦

STUDIO NOTES

Mrs. S. V. Culp has just returned home from a visit to the World's Fair and the East and during her trip visited all the prominent studios and brought back with her renewed enthusiasm for the work in china painting as well as some fine specimens of the art.

✦ ✦

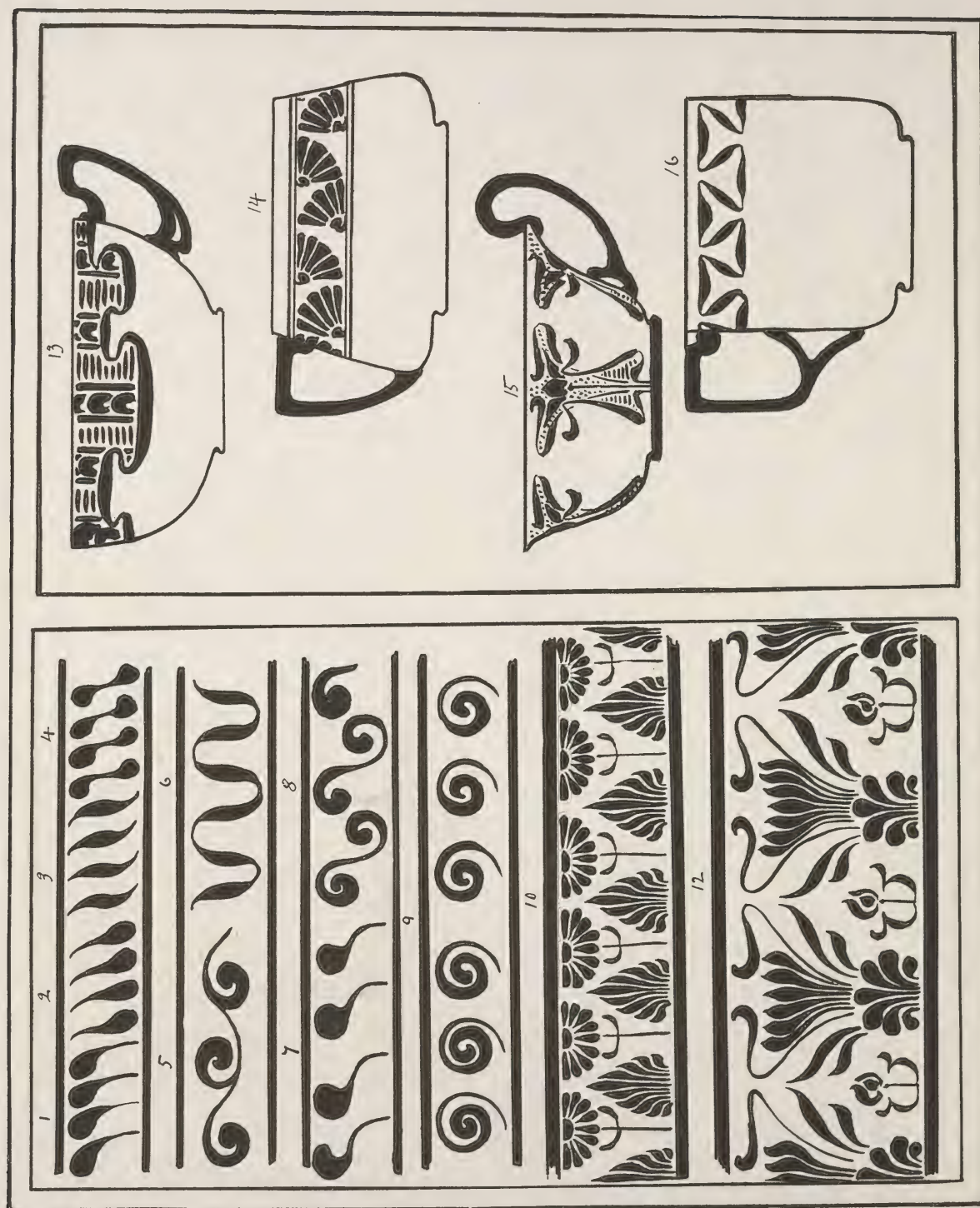
BRUSH WORK

(CONTINUED)

W. P. Jervis and F. H. Rhead

LESSON 2.

THIS lesson deals with curved strokes, giving examples of simple designs in which curved strokes are used. For figures 1 to 4 observe the same directions as given for the same numbers on sheet 1. Figures 5, 6, 7, 8 and 9 look a little more formidable, but by this time the student will have acquired a certain dexterity with the brush and with a little practice they can easily be made. Practice the borders until you can do them swiftly and of an uniform size. The strokes are done with what is more a matter of "feel" than anything else, when the shape required is perfectly understood, and the knowledge that a shape is large and wide makes the brush go down on the paper as a matter of course, whilst only the point is being used for fine lines. Figure 6 is excellent practice both for making each form separately and for making a continuous border as long as there is any color in the brush. Figures 10 and 12 are lessons in making forms composed. (Figures shown on next page.)



NATIONAL LEAGUE OF MINERAL PAINTERS

The study course presented to the Board by Miss Perry was unanimously accepted. All, who are giving this matter serious attention, believe it to be another step forward. We moved Miss Perry a vote of thanks.

In the effort to explain all details, to simplify and condense matters, so that no time should be lost, to cover all official needs, in changing offices to the West, one mistake of importance was made. Seven, instead of six, members were provided for the Advisory Board. Mrs. Perley of San Francisco, Cal., was elected and failed to receive notice.

The League is particularly happy in having a Board member on the Pacific coast just now, as an application already has been forwarded to Portland, Oregon, to exhibit at the Lewis & Clark Centennial. We did not hesitate to urge this exhibition at the Board meeting, because of the number of regrets received, both verbally and in writing, regarding our failure to exhibit at St. Louis. This, we call a providential opportunity of retrieval. The success or failure of our exhibitions rest upon each member individually.

It was further voted, at our Board meeting, to hold our travelling exhibition, to invite the chairmen of committees to be guests at the regular Advisory Board meetings, and to hold those meetings on the 3rd Friday of every month, at three o'clock P. M. at the Art Institute. All distant league members, visiting our city, are invited to attend.

BELLE B. VESEY,

GRACE P. MCMURTRY, President.
Corresponding Secretary, 6927 Normal ave., Chicago.

STUDY COURSE

Problem 1—Outline drawing for tea cup and saucer. To be manufactured and named after or by the designer.

Prob. 2—Design for 6 x 6 inch tile.

To be carried out in water color; in overglaze decoration, or executed in the clay.

Prob. 3—Jar—with or without cover.

To be built of clay by hand, thrown on a wheel or made in a mould. With or without glaze or ornamentation.

Prob. 4—Ten inch plate—plain with rim.

Prob. 5—Bowl—6 inch diameter, to be made from a League design.

Prob. 6—Tile or porcelain slab, 9 x 12 inches.

Prob. 7—Vase—Cylindrical, to be made from a League design.

MARY CHASE PERRY,
Chairman Com. of Education.

The year's work of the N. L. M. P. will consist of a study course of seven parts, beginning with a simple outline drawing for a teacup and saucer. There is no more practical demand in the realm of ceramics and it is to be hoped that a really good shape will result. There is especial need of a good handle, taking not only the ornamental possibility into consideration, but actual usage as well.

The next problem is an exercise in design which will hold the interest of all classes of workers, as it admits not only suggestions in a creative way, but also the complete execution in either color or plastic clay.

The third problem is not merely intended for those who are working in pottery, as has been too often inferred, but for every student of ceramics. Aside from any fascination which the clay itself may hold, it will prove a strong aid to the understanding of and feeling for form.

The four remaining problems are self-contained and each with its own object to present. They offer a field for the application of truths which will happily become apparent through the mental effort in former study.

As far as possible, it is the intention to embrace the study course as a whole and not merely selecting the part which appeals to each individual worker. We are trying to outgrow the emotional phase of admiration and interest in decoration and to acquire a more intelligent and understanding appreciation of its finer requirements. Our more wise educators have shown that a line of study which necessitates the exercise of the mental faculties—causing one to think—is the starting point of true development. If one selects constantly to choose the shapes or the line of work, which comes most easily to him to do, no matter how attractive the results, the educational benefit is lost.

We do not need to exploit special feats of execution nor technical specialties, in order "to show off". That was the manner of the yesterdays, when to do one's "best work" meant the most elaborate treatment possible, introducing every known trick of the art on the same piece of ware. Now we know that one's "best work" is often—rather always—his most simple yet appropriate conception, relying on the thought back of it, instead of the fanciful execution of a momentary fancy.

By limiting the number of problems as well as the pieces for decoration, the interest is centralized, beside giving greater opportunity for comparative benefits. The strong points and the weak ones as well, show more clearly if carried out within specified limits, so that a helpful stimulus is borne not only to those who look upon the final collection, but must perforce react upon each worker. In this way the perceptions of every ceramist will be opened and his scope broadened and result in an unconscious growth.

MARY CHASE PERRY.



Chinese Bowl in the National Museum at Washington, D. C.

This is a large bowl of pure white K'anghsi porcelain, plain inside. On outside a branch of the peach tree with fruit and leaves, the latter in all stages from the light green of the newly burst leaf to the brown of the withered, and worm-eaten. On the branch is seated a bird, termed by the Chinese a paroquet, having a red beak, brown breast and green plumage. Height of this bowl is 4½ inches; diameter, 8¼ inches.

GRAND FEU CERAMICS

XIV—GRAND FEU COLORS—Mat and Crystalline Glazes

Taxile Doat



In addition to this rich palette which develops on grès only in an oxidising fire, it was natural to determine another palette which would do well in a reducing fire, as grès naturally likes a reducing atmosphere and receives from it its superior qualities of a fine blueish grey tone and a great density. Besides, as grès is destined to be combined

with other materials in architectural construction, it was necessary to give to its surface a mat tone which would harmonize better with the character of stone and brick.

With this end in view, the following glazes have been prepared by simple mixture and grinding:

Mat colorless glaze, slightly opaque:

Feldspar in flour,	30,0
Dry pure clayey kaolin,	40,0
Nemours sand,	28,5
Chalk,	20,0

Mat ivory yellow:

Feldspar,	35,7
Dry pure clayey kaolin,	13,7
Nemours quartz sand,	43,6
Chalk,	15,9
Ground natural rutile*,	9,6

Mat yellow:

Feldspar,	53,0
Clayey kaolin,	14,0
Quartz sand,	14,1
Chalk,	25,5
Rutile,	9,6
Red oxide of iron,	2,4

Mat reddish yellow:

Feldspar,	53,0
Clayey kaolin,	14,0
Quartz sand,	14,1
Chalk,	25,5
Rutile,	9,6
Red oxide of iron,	4,8

Mat violet speckled with yellow:

Feldspar,	33,60
Pure clayey kaolin,	12,89
Quartz sand,	47,00
Chalk,	15,00
Rutile,	6,00
Red oxide of iron,	6,00

Mat crystalline yellow brown:

Feldspar,	33,60
Pure clayey kaolin,	12,89
Quartz sand,	47,00
Chalk,	15,00
Rutile,	9,60
Red oxide of iron,	9,60

Mat crystalline dark green:

Feldspar,	30,85
Clayey kaolin,	25,35
Quartz sand,	36,00
Chalk,	28,00
Rutile,	18,00
Cobalt oxide,	12,00

* Rutile is one of the three forms of titanium dioxide.

Mat blueish grey green:

Feldspar,	53,0
Clayey kaolin,	14,1
Quartz sand,	14,0
Chalk,	25,5
Rutile,	12,0
Cobalt oxide,	1,2

It is with these mat glazes that the great architectural fragment exhibited by Sèvres at the Exposition in 1900 was executed. It is also with these mat glazes that I decorate most of my ceramics. They make a pleasing contrast with the bright glazes used on part of a vase, and resemble more closely the mat effects of nature.

CRYSTALLINE GLAZES

After these, I must mention the crystalline glazes which have been received with such favor by collectors and the public at large. As a result of the researches made at Sèvres, these glazes can be obtained easily, even on large pieces, on grès as well as porcelain. As is the case for reds, the substances which form their composition must first be fused.

In order to vary the relative proportions of zinc oxide and potash, which are the fundamental components of crystalline glazes, and to establish the proportions most suitable to the formation of fine crystals, the two following mixtures are prepared:

	Frit No. 1	Frit No. 2
Dry carbonate of potash,	138	69
Zinc oxide,	162	202,5
Quartz sand (silica),	360	350

These are fused in an oxidising fire, then various mixtures of No. 1 and No. 2 can be tried.

The mixture which gives me the best results is:

Frit No. 1	85
Frit No. 2	15

It is necessary, especially for porcelain, to apply this glaze on biscuit fired pieces, to avoid warping and cracks which would occur, if the glaze was applied on raw or baked ware. The coat of glaze must be quite thick, so that an excess of glaze will flow during firing, and the piece should be placed on a high column made of lute or scraps of porcelain paste.

The presence of zinc oxide in this glaze makes it necessary to have a strictly oxidising atmosphere, and the temperature at which it will develop, is that of new porcelain, 1270° C., or Seger cone 9. A slow cooling favors the development of crystals.

I also use a yellow crystalline glaze which gives me very fine results. It is made by a fritting of the same elements with the addition of rutile:

	Frit No. 3
Dry carbonate of potash,	138
Zinc oxide,	162
Quartz sand,	300
Rutile	82

In this case I mix the glaze as follows:

Frit No. 2	15
Frit No. 3	85

If in Frit No. 3, rutile is replaced by pure titanium oxide, one obtains a colorless crystalline glaze, somewhat different from the first as to the appearance of crystals, and which is of great beauty.

These crystalline glazes, besides the artistic use which can be made of them for the decoration of small cabinet pieces, may be advantageously used in the decoration of tiles for architectural purposes, and give the latter a richness which has never been equalled by any other construction material.

I am satisfied that ceramists who will carefully prepare all

these fine glazes, will find the different processes which I have mentioned, a very useful guide. But one must not forget that all these preparations require some practice, strict weighings on accurate scales, pure materials, very finely ground so that their mixture will be thorough, also frittings made with the most minute attention. All these operations constitute an expenditure of time and labor, and it is to be regretted that chemists do not undertake the production of all the compositions which enter into the decoration of ceramics. I am sure that they would find it profitable, and it would free artists from this complex work, which restricts their art production.

Although the formulae contained in these articles have been studied for the PN porcelain body and the Sèvres grès, and strictly suit them both, artists, especially if other bodies are used, will need to constantly experiment with colored pastes and glazes. For such trials they will find it convenient to use a kiln in which firing will be rapid. I have adopted for this work the small Perrot laboratory furnace, the fuel for which is gas. It will hold six small sample tiles or a small vase 4 inches high and 2 inches wide. The temperature reaches uniformly 1300° C., and the atmosphere is reducing or oxidising at will. Porcelain is fired in it in two hours. This furnace is made by the firm of Mr. Wiesnegg, 64 rue Gay Lussac, Paris, in five different sizes. I use No. 3, which is more exact in its results, and costs 215 francs (about \$40). In this furnace frittings can also be made.

I have now reached the end of these articles which are perhaps beyond the usual scope of this magazine, but which fall in with the programme to which it devotes its energies: the advancement of the potter's art. This art is a part of human attainments, which ennoble man, are necessary to him, and which permanently perpetuate the history of humanity. It is from fragments of the potter's works, found in the ruins of ancient civilizations, that human evolution is reconstructed. And it is to be regretted that these fragments, which have been preserved only in the burning sands of dry climates, have not been made of less destructible material than faience. We would then have numerous documents to tell us the obscure history of the Middle East, of the great Asiatic uplands, the cradle of man.

Better favored by the richness of its soil and the precious quality of its clays, the Extreme East, China, shows us ceramics which, although 4000 years old, have not lost any of their

freshness, their brilliancy or sonority. The sinister crazing, forerunner of ruin, an open door to the disintegrating humidity, has not touched them.

It is the duty of our century, illuminated with science, to use this science for the technical development of wares which will survive, notwithstanding our damp and destructive climate. This goal is reached by the adoption of the finest of clays: kaolin. Its advance has been slow, its study bristling with difficulties, but it is beginning to take its place. Alone with its worthy partner, grès, porcelain possesses, besides its great beauty, this inalterability which will defy the wear of centuries.

These indestructible materials had to be enriched with glazes which would also resist the attacks of time. Modern chemistry is doing this fascinating work. Empiric and scientist, everybody, is bringing his formulae to this edifice of beauty, which progressive publications are anxious to unravel, by advocating the logic and charm of the grand feu. And the day is not far off, when Occidental ceramics, besides their fundamental quality of inalterability, will be "brilliant as a mirror, thin as paper and sonorous as a musical instrument," according to the Chinese poet. They will have also the splendor of Persian faïences, the sumptuousness of Hispano-Moresque wares, the richness of Italian potteries and the variety of the muffle fire palette.

I will conclude by saying that ceramists who will take their inspiration from these articles, and follow the instructions very carefully, are sure to obtain a first result, perhaps shapeless, because they will lack the practical teaching, the use of clay paste and the right handling of their kiln, but there is no doubt that after a few firings, they will begin to see through the complex details which form the technique of grand feu ceramics. At first they may use the PN paste for casting, made by Mr. Frugier, and fire a few simple shapes in the Perrot gas furnace. Thus their first experiments will be made at a very small cost. When they are sure of these first results they can build the coal kiln and pursue their experiments on bodies and colors. After a few coal firings, they will be able to transform the fire mouths into fire mouths for wood, and having mastered the handling of their clay and kiln, they will be able to give a personal touch to their work.

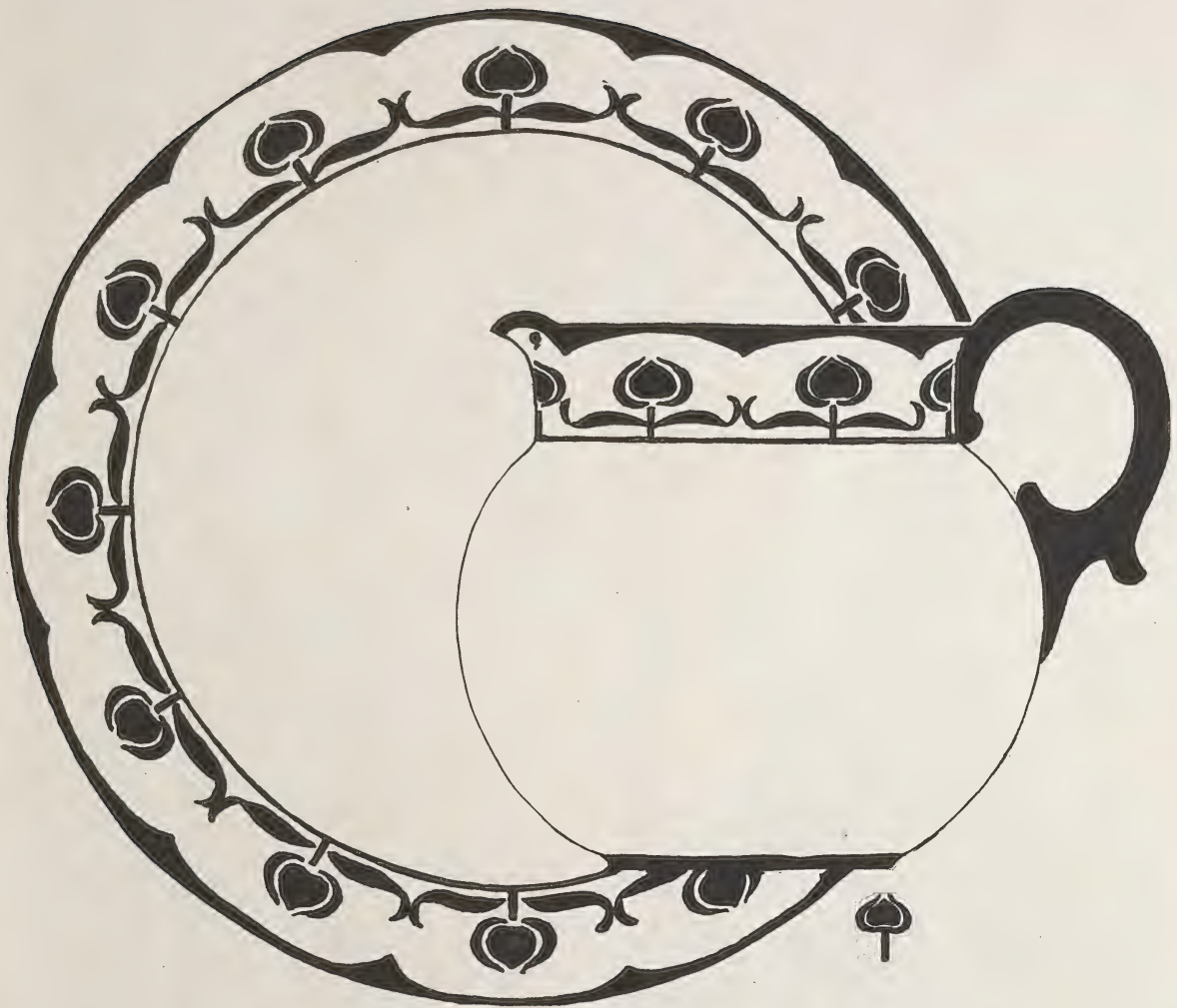
It will be a pleasure for me and the best of rewards, if I succeed in making converts and in reducing their first expenses to a minimum.



Porcelain Vase, crystalline glaze, by Mrs. Alsop Robineau—Cafe au lait ground, ashy grey crystals, outline around bunches of crystals reddish brown.



SUNFLOWER—MRS. K. E. CHERRY



DESIGN FOR CHILD'S SET OF THREE PIECES—BUTTERCUP—ALICE B. SHARRARD.

This set would be effective carried out entirely in Gold, or in rich shade of Yellow outlined in Black. Copenhagen Blue or Grey would also be pretty.

TRILLIUM

Adelaide Alsop Robineau

HERE are many varieties of the Trillium but the general characteristics are alike all over the country, the noticeable variation being generally one of color or size. Ordinarily one comes across the large white Trillium which turns pinkish with approaching age and finally a delicate violet before withering. On these the sepals are usually green and about the length of the petals but much narrower, in some varieties the sepals are much longer than the petals and of a purplish brown twisting at the ends as on the moccasin flower. Then one occasionally finds a scarlet variety or white with purple markings on the inner part of petals. So in conventionalizing the flower for design, one can without departing much from the natural motif vary the size and proportions of petals and sepals as well as the color.

In order to demonstrate the immediate applicability of a course in design to the decoration of porcelain, it seems advisable to select those problems which do not seem to be directly bearing on the work and show how they may be utilized.

Problem I: To compose a flower form in a rectangle so that the shapes of areas are well considered, the divisions of space are good, masses of dark and light balance and line movement is harmonious, also color as indicated by variations of grey. Figure 3 is an application to a pitcher of this flower composition. In repeating and using the entire panel as a motif it will be found necessary to extend some of the lines and eliminate others in order to make a simple and harmonious



Figure 3.



Problem I. Figure 1.

rythm. First repeat the motif exactly, then consider what lines may be omitted without injury to the design and line movement, omit all that you possibly can and continue the others so that the motif connects and makes a continuous border, change any lines that do not harmonize with the shape of the piece decorated, so that the form is emphasized; in the example given, the shape of the pitcher would be better if it bulged more in the middle; in that case the drooping flowers fit still better, emphasizing the fullest part of the curve. The color of the leaves is changed here so as to bring the lighter leaves in front of the darker, thus also emphasizing the curve in

color as in form. The lower part of stems might very well be made less conspicuous in color, fading away to the tone of the leaf where it passes under it. This would help also to keep the roundness of the pitcher. A good color treatment for this design would be as follows:

Tint the entire pitcher a greyish yellow tone—Neutral Yellow or Yellow Ochre with a touch of Black—then fire. Dust the same color over the background and darker leaves and stems, wiping out the flower petals and the lighter leaves, stems and sepals, which may be painted lightly with Moss Green. Use this light green also for light bands around top of pitcher, also the handle, the darker bands should be painted thinly with Pompadour touched with Black, dust this reddish tone also over the already dusted background at the base of the pitcher and over the lower stems and band at base, first painting them with the green; the darker green leaves and stems will be of the same green painted a little heavier and dusted lightly with the red—outline in a mixture of the green and red making a rather warm brown green. If after the second fire the colors do not quite harmonize the whole effect can be brought together by a last dusting color, of whatever tone is too weak.

Problem II: A symmetrical arrangement of a flower form in a panel, paying special attention to the same points as

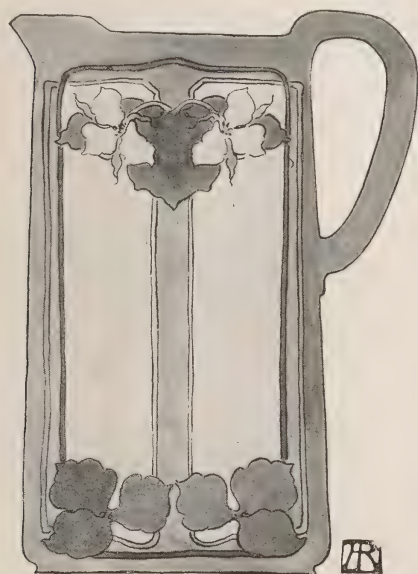
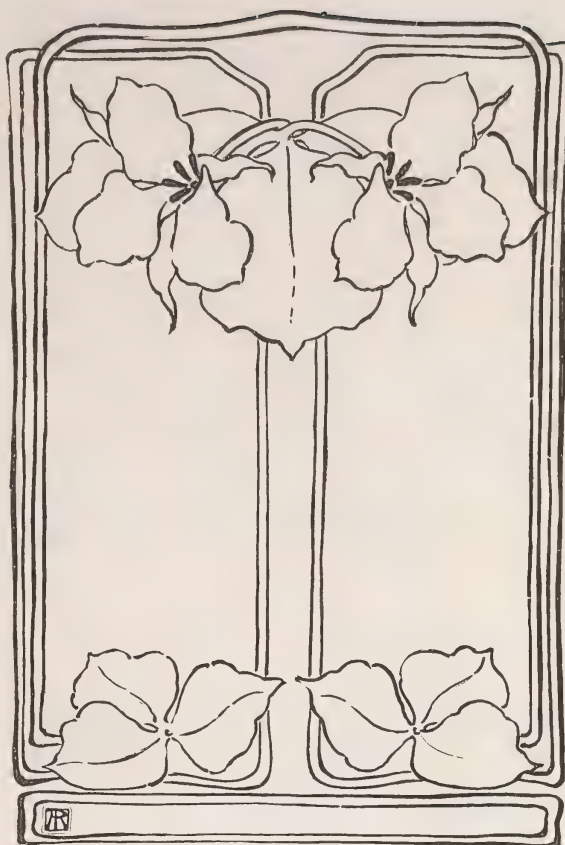


Figure 4.

Prob. I. Fig. 4 is a direct application of this problem with the addition of color. It will be easy to adapt this design to any form of pitcher by simply lengthening or shortening the stems and letting them and the dark panels follow the perpendicular of the piece to be decorated, leaving any widening or changing of space to show in the light panels only. A good color scheme for this pitcher would be as follows: Tint the entire pitcher an ivory yellow and fire. Tint the light panels again, leaving the flower as it comes from the fire. Tint the darker panels and handle yellow brown, the leaves and stems, the same with a darker brown added, outline in brown slightly darker—or if green tones are preferred, the darker portions can be executed in varying shades of green. A third fire in which



Problem II. Figure 2.

the piece will have a dusting all over of either ivory yellow or light green would bring the piece well together or if the color does not just please when it comes from the second fire, a



Problem IV. Figure 5.



Problem IV. Figure 6.

dusting may be given of some other color which will quite change the effect.

Problem IV: An all over pattern to develop the judgment on the same points as in problem I with the addition of repetition at suitable intervals vertically and horizontally, not crowding or scattering, and striving for simplicity—the lower part of Fig. 5 shows the effect of crowding—forms of background spaces to be especially considered. Fig. 6 is another

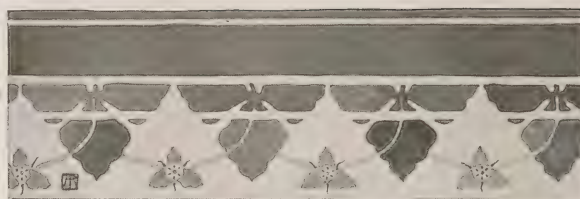


Figure 7.

example of the same problem showing the units connected. Fig. 7 is an application of Fig. 5 to a border for a bowl, adding the leaf to give variety. This can be agreeably executed in almost any color scheme. Fig. 8 is an application of Fig. 6, to be executed in yellow, yellow brown lustre and gold—repeated washings and firings of the lustre will give varying tones and develop pearly tints in the yellow lustre which are very attractive.

Problem V: A tile composition based on the "Swastica," still considering the same points as in Problem I, but adding four sided symmetry and a still more strict conventionalization, as being more appropriate to its use. To be executed in three tones of any desired color scheme.

Problem VI: Is a study of "Facts about flowers," with a conventionalization of the same, is a simple application of one of these motifs in a repeat as a border for a bowl, plate or cup and saucer, this would be effective in grey and blue.

Problem VII is similar to Problem I, making the arrangement in a fan shape. Fig. 10 is an application of this panel to a bowl, it would perhaps be better if this panel were a little longer in proportion to its width, thus giving more space in the middle background. The vertical lines below might be omitted if

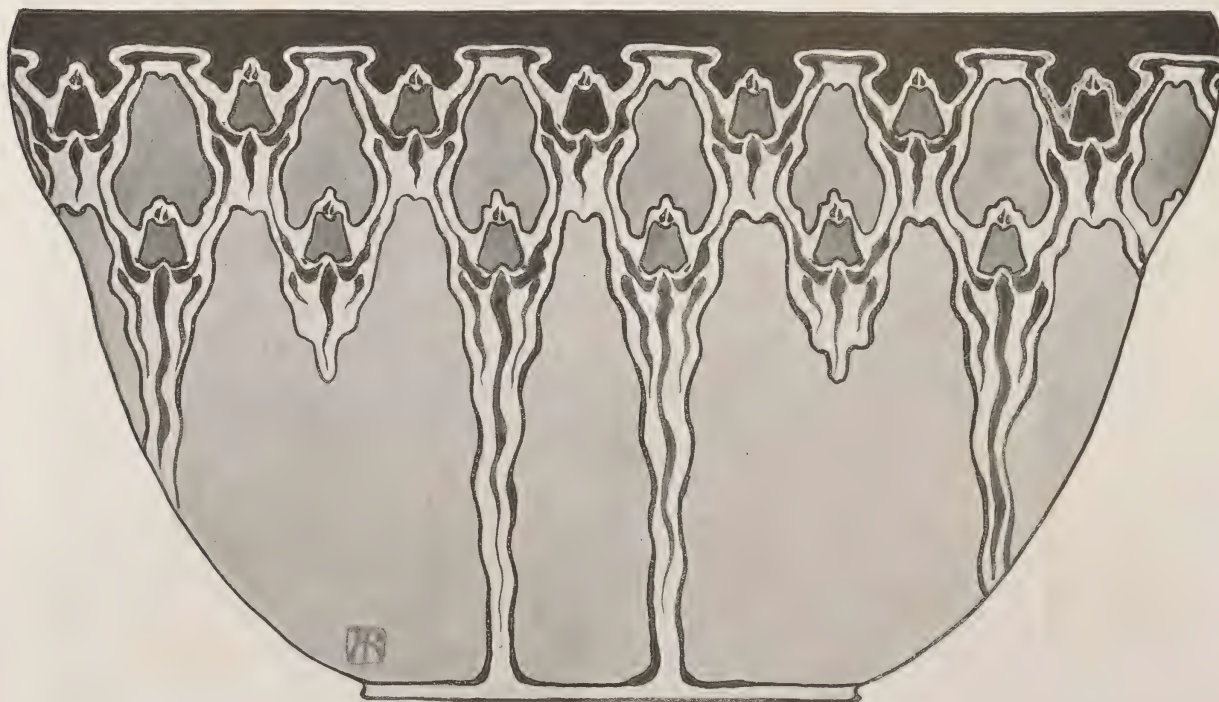


Figure 8.



Problem V.

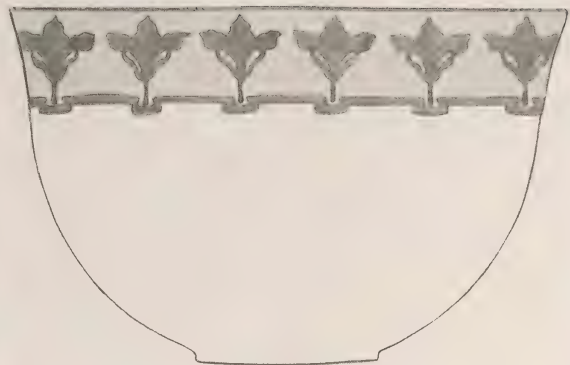
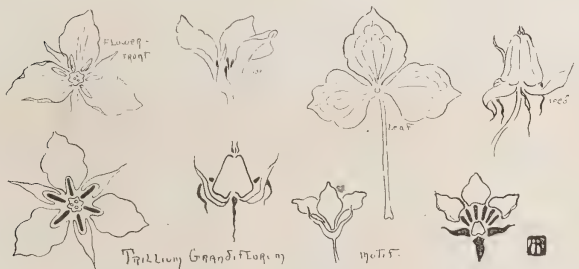


Figure 9.

or Royal Green, the trilliums should have another wash of the neutral yellow. If after firing the design does not hold well with the bowl, give a final dusting of the neutral yellow or any tone which will bring it more in harmony. This point of harmony of color *must* be decided by the decorator. Directions

desired. The following color scheme is suggested: Dust the bowl outside and tint it inside with neutral or some warm greyish yellow and fire it, make the rim and background of



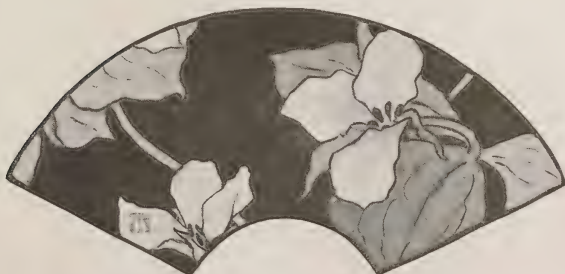
Problem VI.



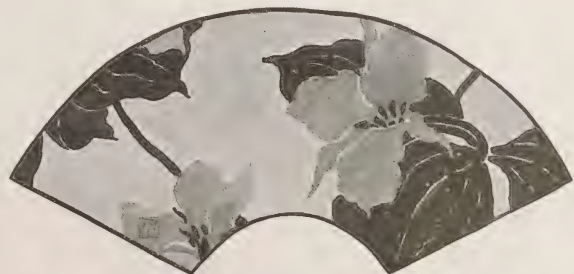
Figure 10.

flower panels, also outlines, a dark blue, perhaps Royal Blue with a touch of Black, or Banding Blue with a touch of Purple and Black; the leaves, stems and bands should be painted Moss

are given but no two decorators work alike and the results will be varying in intensity of color and only the one who is working at it can judge when the harmony is complete and satisfying.



Problem VII.



Problem VII.



CHILD'S BREAD AND MILK SET—CLOVER—AUSTIN ROSSER.

This set is to be done in monochrome using a tint for ground and medium flat tone for design.



PANSIES—E. LOUISE JENKINS

SEPTEMBER, 1904
SUPPLEMENT TO
KERAMIC STUDIO

COPYRIGHT, 1904
KERAMIC STUDIO PUB. CO.
SYRACUSE, N. Y.



DECORATIVE STUDY OF TRILLIUM—FIRST MENTION—HANNAH OVERBECK



FIJI POTTERY

Randolph I. Geare

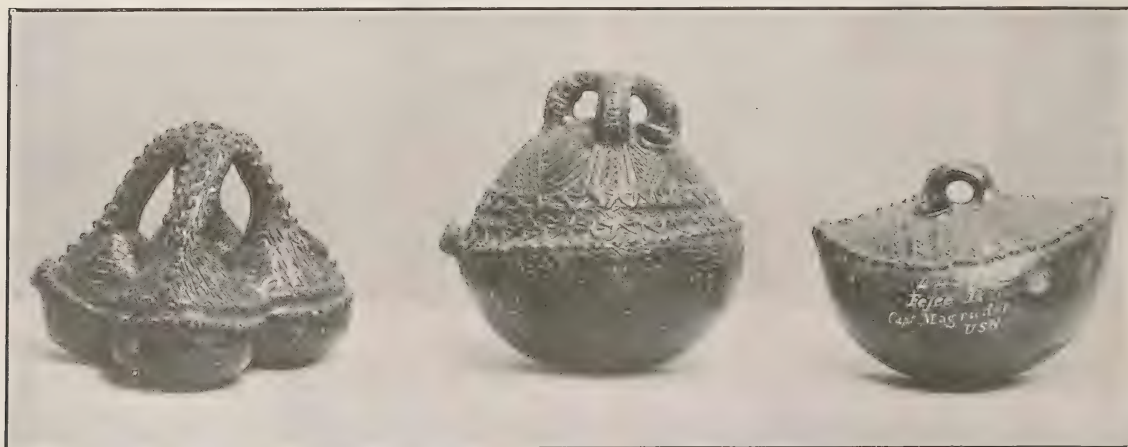
THE Fiji or Viti group, which passed under the sway of Great Britain in 1874, comprises about two hundred and twenty-five reef-bound islands. Only two are of any considerable size, namely, Viti Levu and Vanua Levu.

Travellers have often recorded their astonishment at finding in these islands pronounced evidences of artistic skill, and this is the more surprising as the inhabitants of neighboring groups seem to be destitute of any tendency of the kind. Thus in the Navigator Islands, there seems to be no manufacture of pottery even of the rudest description. Nor can this be accounted for by the absence of suitable clays, as these last mentioned islands possess material eminently adapted to the making of pottery. One explorer in the Fiji islands, referring especially to the native pottery, writes, "I was constantly struck with the originality of their patterns, the fertility of their inventions, and the ingenuity with which they were applied to the object to be decorated." The native Fiji pottery is therefore to be highly commended, and considering the

coarseness of the materials used and the rude manner in which it is fashioned, and also that the people are such as the civilized world has been accustomed to regard as mere savages, one cannot fail to be deeply impressed by the artistic beauty and great variety of the forms produced.

The pottery of Fiji is always made by the women, and is hand-made. The potter exercises her sweet will as to the size, form and ornamentation of the object. Some of the jars are more than two feet high, oviform and with large mouths. The chief peculiarity about their form is that they are generally without a flat base to stand on, the bottom being merely a continuation of the curves of the sides. When they are required to stand erect, they have to be placed in deep rings of plaited grass, and when used for culinary purposes, they are placed sideways on the fire. Seemingly, this lack of a base to stand on must often have proved very inconvenient, and the perpetuation of this awkward form is only another proof of the difficulty in getting away from stereotyped customs that have been inherited from other regions through preceding generations.

The large pots are used for cooking "dalo", the native



vegetable in common use for food. At various points in the islands have been found saucer-shaped dishes of a bright terra-cotta color, some of them displaying beautiful tints of amber, brown and gold. Large spherical jars for holding water, with short necks and footless, like the cooking pots, are made in large numbers. It is doubly curious that this unstable form should have extended to the water-jars, which of all things one would suppose should be able to stand upright without assistance. Some of the more fanciful articles have very quaint forms, the potter having evidently modeled her jars after various kinds of fruit and other common objects. One—an oil vessel—evidently was intended to represent a cluster of oranges. A small bottle was fashioned after a specimen of bread-fruit with a slice of the rind removed. Carved wooden cups, too, are sometimes imitated in pottery, while other articles are modeled like canoes and other objects with which their minds are readily associated.

The process, which is about the same whatever may be the form of the object to be manufactured, is known as "coiling", and may be described as follows: The potter takes a lump of damp clay in one hand and presses into it a round stone (which is to be the bottom of the jar) held in the other, molding the clay up over the sides of the stone with a flat, smooth piece of wood shaped like a spoon. Fresh clay is added in long

sausage-shaped rolls, the stone being still held inside, while the clay is patted and pressed with the piece of wood from the outside. In due course, the shoulders of the jar are rounded, the lip added, the first smoothing-over completed, and the jar is made.

After being allowed to dry in the sun for some time, the pots are first baked on a light straw fire and afterwards with wood, and while still hot are glazed with the heated resin of the ndakua pine, very similar to the Kauri pine of New Zealand, which yields a beautiful amber-like gum.

The ware is generally yellowish red, the tint varying with the kind of clay used.

In one or two districts, instead of building up a series of clay sausages, the women beat out a flat piece of clay on their hand, and then gradually mold it into a cup-like form over a smooth stone with the aid of a wooden spoon. After drying for several days, the pot is taken to a sheltered nook, where a pile of light wood and sticks is built. On this the pot is laid, covered over with sticks. Fire is then applied and kept burning for about half an hour. Then, while still hot, the pot is well rubbed with a dark red dye—an infusion of mangrove-bark—which gives it a slight glaze and a red color. Fiji pots are often decorated around the neck and shoulders with dots and lines, which are incised in the clay while still moist.



Yellow Mustard



Grass



HIGH BUSH CRANBERRY—MRS. C. L. WILLIAMS.

HIGH BUSH CRANBERRY

Mrs. C. L. Williams

MINERAL COLORS

FIRST fire—For the leaves in the foreground use Moss Green in the lightest parts, shading with Dark Green No. 7 and Brown Green, using the latter combination with a touch of black in the deepest shadows. The more distant leaves are painted with Apple Green and Empire Green. The turned over edges are painted with a combination of Apple Green and Copenhagen Grey to give a greenish grey tint. Wipe out the flower clusters, keeping the edges of the distant ones very soft. The small center flowers are cream color with green centers; paint them with Yellow Brown and Empire Green. Wash over the larger flowers with the thinnest tint of Ivory. For the larger stems use Violet of Iron and a little warm grey, running this into a delicate green where they join the flower clusters. Make the background a delicate green at the top shading into dark green at the bottom. Paint the shadowy leaves into the background while wet, and pad the latter over the edges of the distant flower clusters. Dry and dust with Ivory Glaze.

Second fire—Strengthen the leaves and shadows with the same colors used before. Shade the larger flowers with a grey composed of Pearl Grey and a little Black. The little dot in the centers is nearly black. Shade the small flowers with Brown Green and Yellow Brown. The little stamens may be made with White Enamel. Should the greens be too light retouch and fire again.

WATER COLORS

Use Whatman's paper. Sketch design very lightly. Moisten the paper on the back and lay it over wet blotting paper. The leaves are painted with Hooker's Green No. 1 and Aurora Yellow for lightest tints. Use Hooker's Green No. 2, with Olive Green for darker tones, adding a trifle Payne's Grey and Alizarin Crimson in the deepest shadows. Wash over the larger flowers of the cluster with a very light wash of Yellow ochre and Payne's Grey. Paint the stems with Madder Brown where they are largest, gradually running into a delicate green where they join the flower clusters. Wash in the background with same colors used in the leaves, making it darkest in the lower right hand side. In finishing work out the principal leaves and center cluster carefully. The small center flowers are painted with Chinese White and Yellow Ochre. Use Chinese White with a trifle Yellow Ochre on the high lights in the larger flowers as the paper does not give the right tint. Stamens are of Yellow Ochre and Chinese White.



CUTTING GLASS IS EASY

Diamonds Not the Only Things Needed to Sever the Brittle Substance

IT often occurs that glass tubes of various dimensions have to be cut where a diamond is not at hand, as in shops and power plants, where oil and water gauge tubes must be neatly fitted. The usual method adopted is to file a small groove around the tube and separate the glass with a sharp rap at the place weakened by the file. The result is not always satisfactory because the ends often break unevenly, owing to the difficulty of making a straight groove with the file. Better results are obtained when only a small incision is made with a file, just enough to cut through the enamel of the tube on one side, and not all around. While the tube is still warm from the friction of the file, the tube is then taken between the thumbs and forefingers around the tubing, close, but not covering the incision. Pressure of the thumbs invariably causes the tube to break in as straight and clean a line as though cut with a diamond.

Another method is to use a fine saw blade (the finer toothed

the better, for saw is only another form of file) and this should be kept fed with fine emery, carborundum of pulverized silica, sand or hard grit, moistened with camphor, oil, turpentine or water.

A straight, steady and even stroke should be made, and when the work is carefully done against a gauge the cut will be as true as though it had been ground. Nor is even a toothed blade necessary if a suitably hard and finely gritted abrasive is used and regularly fed between the glass and fine wire, watch spring or blunt, but even, blade of an ordinary table knife. The latter will be somewhat slow, of course, but a fine steel wire, run at high speed like a band saw, if regularly fed with fine emery or carborundum, will give very satisfactory results, not only for cutting either straight lines or curves in window, but plate or optical glass, in such thickness as makes cutting with a diamond difficult, precarious or impossible.

Window glass, especially single strength, can be accurately split either in straight or curved lines by first making an incision through the enamel of the glass and then holding a hot iron close to the incision till a fracture is started. The fracture will follow the hot iron with remarkable fidelity. The iron should be preferably round and somewhat blunt and with a bulky head (like an ordinary fire poker), so as to retain its heat well for long cuts, especially for thick sheets, to keep the fracture going when once started, even if two heated irons have to be used.—National Gas Budget.



TRILLIUM ERECTUM.

Jennie Hanson

THIS plant that sends its fetid odor up to your face as you stoop to admire its beauty of form and color needs for its sepals a rich light green.

Petals are a dull red with a hint of purplish brown in its darker shadows. Stem brownish most of the way down.

Center of flowers six pointed and same red color of petals. pistil yellow, stamens pale grey green with line of red lengthwise through its center. Plant leaf, rich green, lighter underside.



HONEYSUCKLE—MARY C. THOMAS

THE Honeysuckle is a rich cream in color, shading into red, the buds crimson; as it grows older the cream color becomes darker in tone; the leaves are of a whitish green, the stem reddish. For painting use Albert Yellow (or Orange La-Croix), Pompadour or Carnation Red, Moss Green and Brown Green.



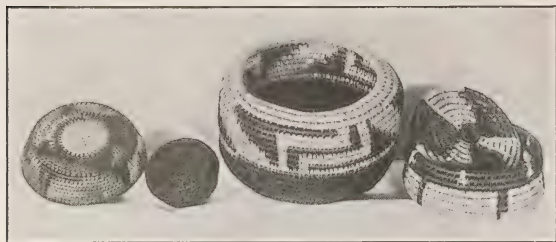
TEA TILE—MARY E. MASON

Ground neutral yellow, border black, figure, orange lustre, covered with yellow lustre in second fire. Center of figure, silver.

THE CRAFTS

WOOD CARVING AND PYROGRAPHY. LEATHER AND METAL. BASKETRY, ETC.

Under the management of Miss Emily Peacock, summer address, 4477 Western Ave., Westmount, Montreal, Can. All inquiries in regard to the various Crafts are to be sent to the above address, but will be answered in the magazine under this head.



A Group of Baskets.

SOME WORK IN RAFFIA

Madge E. Weinland

RAFFIA is a grass-like fibre imported from Madagascar where it is obtained from the leaves of the raffia palm. These leaves grow to an enormous length and are stripped of their outer skin, which is dried and twisted into hanks. It can be obtained at seed stores in the natural color or dyed in various colors and shades. Before using, the undyed material should be washed in hot water until thoroughly saturated and then hung up to dry. This treatment softens the strands, making them more pliable and easily worked.

To make a raffia basket, first thread a single strand of raffia at the larger end into a No. 2 darning needle. Choose several strands of raffia (say twelve) and double them. This is to form the roll or filling and will make one of large size, but a smaller one can be made of from one to three double strands.

Commencing at the folded ends of the strands that have been doubled, hold the smaller end of the weaver, or threaded strand, in with the filling and wind the weaver toward you nine times around, not overlapping (Fig. 1). Bend the roll in such



A Raffia Basket—First Steps. Fig. 1.

a way as to bring the two ends together and pass the needle through the first end or starting place (Fig. 1). Wind three more times around the filling and insert the needle through the hole in the center of the coil. Wind three times again and pass the needle through the same point. Repeat this until you have worked once around the coil. Now insert the needle through the roll instead of through the hole in the center of the coil as heretofore. Wind three times around and again insert the needle through the roll. Continue this stitch until the basket is finished.

Having made the bottom the size desired, form the side, by gradually carrying the roll upward until it lies over the previous roll. To end the basket after reaching the desired size, remove the filling by cutting out two or three strands, at a time, commencing directly over the point where the side was started.

To maintain the size of the roll, as the strands run out, lay in new ones but do *not* tie them. When the weaver is nearly used up lay the end in with the filling and thread a new one, placing the end into the filling as before. By using weavers of different colors and working in a design, a more effective basket can be made.



A Knotted Bag for Twine.—Fig 2.

KNOTTED BAG (FIG. 2)

Select 17 strands of raffia of uniform size and of the desired color. Loop them at their middle point around a stick 18 inches long and knot each one, placing them half an inch apart. The loops must be of uniform size so that the knots will be in a straight line. About half an inch below these, knot one strand of each pair with a strand of the next pair, leaving an unknotted strand at each end. This forms the second row of knots. Continue this, dropping off a strand at each end of the row, until you have completed a V shape mesh. Remove the stick, bring the two edges of the mesh together and join them by knotting, thus forming a bag. If this work is carefully done, the joining will not be noticeable. Tie the

bottom by winding tightly around with a strand of raffia. Cut off the ends of all strands four inches below this point, thus forming a fringe. Draw a strand of raffia through the loop at the top of bag, cut to the desired length and tie two ends together.



Travelling Glass. (Fig. 3)

TRAVELLING GLASS (FIG. 3)

To make the cover select a glass of the size desired. Make the bottom of the cover one roll larger than the base of the glass, then turn the roll as described in the basket instructions, but insert the needle underneath the roll instead of into it. Bands of various colors can be woven in if so desired. When the work covers half the glass, end the lower half more abruptly than the ending of the basket. Make the upper half in exactly the same manner and fit over the glass.

The colors used in the glass cover shown are light blue with black and orange with black.

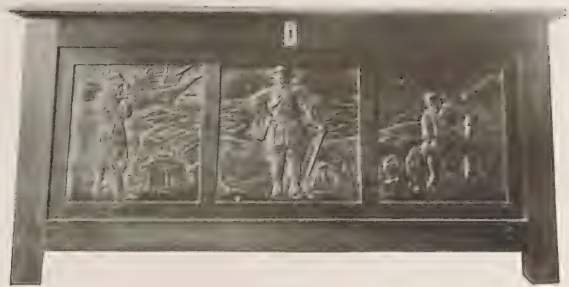
A reed filling can be used instead of the raffia filling, but with reed a different stitch must be made.

In Fig. 4 the small stripe is alternate squares of black and green, the wide band is black with Indian red designs.

The two largest baskets in the group are made from brown and natural raffia.



A Raffia Basket. (Fig. 4)

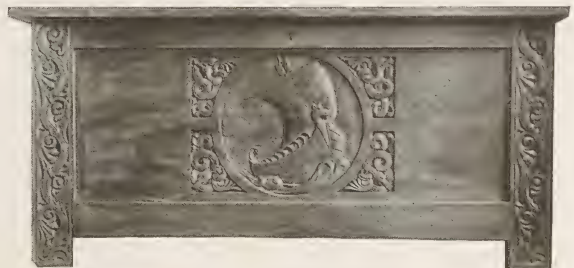


Miss Robinson, Pratt Institute.

TWO WOOD CHESTS AND A WALL CABINET

THE wood chests designed and executed by Miss Robinson and Miss L. Todd, Pratt Institute, were both made of butternut and carved in low relief.

The one made by Miss Robinson was colored with malachite green, mixed with ebony black and a soft finish put on with wax. Miss Todd used walnut stain for color and also a soft wax finish. The small wall cabinet designed and executed



Miss L. Todd, Pratt Institute.

by Miss C. H. Budd, Pratt Institute, was made of English oak and measured 2 ft. x 1 ft. 9 in. x 6. The carving on each side panel was done in low relief, and also the quotation at the top, "Silo et philosophus esto." In the center of each of the small doors, there was an open space $3\frac{1}{2}$ inches square, these spaces were filled in with dark green stained glass, and over the glass a square of pierced copper was fastened. The hinges and handles were colored with acid until they harmonized with the wood.



Miss C. H. Budd, Pratt Institute.



TEA CADDY

Emily F. Peacock

THE tea caddy illustrated is made of copper and brass, the body part, practically two bowls soldered together.

MATERIALS REQUIRED

A circle of copper 6 inches in diameter, 20 gauge, a circle of brass 6 inches in diameter, 20 gauge. For the lid a circle of brass 2½ inches in diameter and a strip ¼ x 7½ inches of the same material, also a knob of copper or brass.

TOOLS

Pattern block and hammer as given in the June issue, page 47. Pattern block Fig. 1, page 70, July issue. Anvil, round steel punch, steel compass and point, silver solder, flux, blowpipe and flame, etching acid, glass or porcelain dish, files, emery cloth and sand bag.

METHOD

To form the lower part of the tea caddy hammer the circle of copper two inches from the centre out to the edge on the wood pattern, see Fig. 1, page 47, June issue. Keep the bottom of the bowl perfectly flat and the sides rather straight. When the bowl is the proper shape make the edge very true with a file and emery cloth. Place the bottom of the bowl on cement or on a sand bag and with the steel punch repoussé from the inside three small feet at equal distances. The brass bowl or upper part of the tea caddy is hammered on a pattern block into a gradual curve (see July issue, page 70). Commence to hammer the circle of brass one inch from the centre and continue until the bowl assumes a good shape and fits well over the lower bowl. The next step is to make the opening for the lid. Mark a circle with the steel compass in the centre of the brass bowl 2 inches in diameter, and another circle outside this one almost a quarter of an inch larger. Saw out the smaller circle with a hand saw, hold the edge of the larger circle against the anvil and with a rounding hammer beat back the metal along the marked line very gradually. This process should make a straight neck for the lid to fit over.

To make the lid, slightly curve the small circle of brass and bend the narrow strips to fit round it, this must also fit the neck of the tea caddy. Solder the ends of the strips together, making a ring, wire this to the top part, and solder from the inside. The knob can either be soldered or riveted, in the exact centre of the lid. Arrange the Japanese signs for Spring, Summer and Autumn around the top part of the tea caddy and mark them in with a steel point. Put the sign for Winter on the lid. Etch these in with nitric acid, as given in July, 1903, KERAMIC STUDIO.

When the etching is done the two bowls are soldered together. Atmosphere gives the best tones to the outside of the tea caddy but a silver plated lining inside adds to its value.

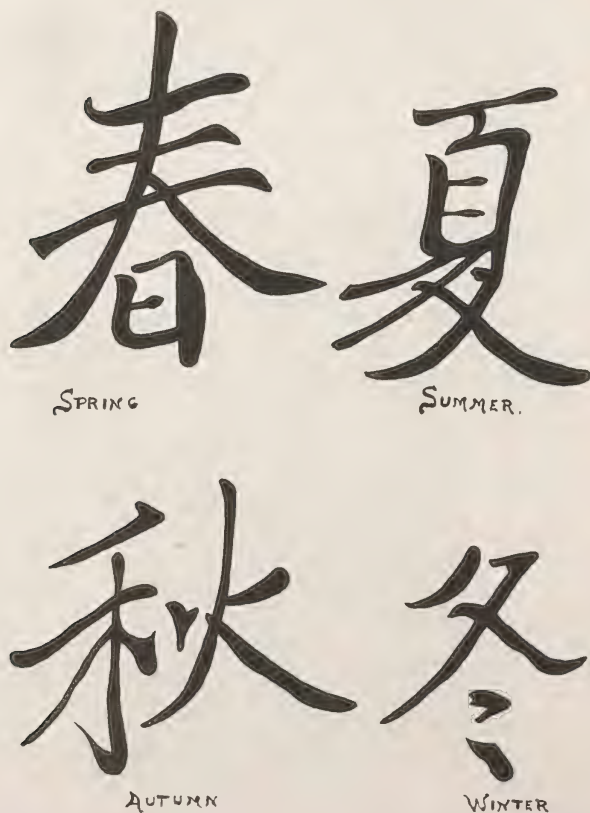


THE PRIMITIVE ARTS CLUB

A LITTLE over a year ago the "Primitive Arts Club" was organized in Brooklyn, N. Y., and became permanent in the fall of 1902 with resident officers, and a board of directors chosen partly from the out of town membership. Miss Lena Eppendorff, the promotor, was elected president, Miss Mary White, vice-president, and Miss Eloise Prentice financial secretary. A meeting place was generously offered by the Misses Griswold and all meetings but one have been held at their studio, 221, Washington avenue, Brooklyn.

The idea of the club was to bring together handworkers in various lines, especially those experimenting with raw materials and the simpler processes of construction (without use of machinery) that all might be benefitted by the experience of each other and the labor of investigation economized. Scientific accuracy in naming and testing could not be ignored although no exhibit would be considered complete without labelled specimens of raw materials and the finished article attesting beauty of color, form and design in useful articles.

In March, 1903, the meeting for the discussion of basketry was very enthusiastic. Miss Marie Perrin, of the Ethical Culture School, gave an account of the children's delight in all these early stages of art work. Miss Mary White read a paper on Indian basketry, explaining the stitches, the materials and the significance of the work to the makers. Miss Helene V. Johnson of Providence spoke on mat making among the South Sea Islanders. She told also of her studies among the Western Indians of North America and how she won them as friends before they could be persuaded to be her teachers.



Miss Romiett Stevens has with her high school pupils at Pratt Institute been inventing looms and making baskets, using Industrial History as a basis and testing all the allusions to simple home manufactures.

At the June meeting Miss Dopp of Chicago University spoke informally on the value of primitive research as an educational basis, and the keen interest with which little children follow the same evolution through experiments by which the race development to civilization has been achieved. The care and use of our native products she recognized as a field too sadly ignored by our modern arts and crafts workers.

In November, 1903, Dr. Grout of the Botanical Department of the Brooklyn Institute of Arts and Sciences gave a most interesting talk on "Our native grasses, rushes and sedges, how to classify them." The character of leaf, flower, stem and fruit were clearly pointed out and the members eagerly inquired for help in drying and keeping the color for grasses and sought all the practical help possible. Dr. Grout's interest in mosses led to his speaking further of researches in that direction and at the next meeting he named and classified the grasses already gathered.

At the Museum of Natural History in New York City, Dr. Wissler lectured before the club on weaving. The art was traced from thread making to the production of the finest modern fabrics. He explained the development of the spindle whorl and the loom with heddles and shuttle. The lecture was very fully illustrated by specimens from the cases of the museum including also cords, braiding, matting, bark cloth and Siberian fur garments in which animal sinews were used in sewing instead of thread.

The exhibit held on the 13th and 14th of May 1904, included many loaned articles. There were grasses, sedges, rushes, and twigs, vines, etc., gathered by members and exemplifying materials which had been used in basketry or weaving, from schools or private individuals, complete exhibits of the commercial fibres, cotton, flax, hemp, jute and wool were presented in different stages from plant to loom.

There were fine specimens of intricate plaiting in palm and fibres from the Pacific Islands and South America. Baskets from almost every quarter of the globe, like the old Nantucket sign which read, "blue quart bowls, all colors and sizes, 9 pence apiece, and various prices." Peasant pottery from Europe and America, and clay modeling with metal work from students of the Pratt Institute High School and a bronze scone by Miss Kimball. There were a few specimens of old colonial weaving, while embroidery showed the skilled work of long ago beside the modern Swedish cut linen and the homespun from Berea College. Several interesting experiments were shown in different looms for weaving and batticks from the New York Guild of Arts combined most exquisite colors. Childrens' work from several schools showed as much skill often as their teachers'. A table for members' experiments included symbolism in design as well as new materials: leather, wood, bric-a-brac, roots, bittersweet, grape-vines, ground pine, stems and flowers of the immortelle, sensitive fern, blackberry shoots, Japanese iris leaves, lemon lily, sea-weeds, and mosses proved the enthusiasm of venturesome workers. Several beautiful fibers from the far East had been attractively dyed and deftly woven. Soft colors in the dyed raffia suggested to Miss Mary White a design for pink and brown moths on a very fine twined basket. To another worker the silvery wisteria fiber and dull brown and deep green raffia led to a combination named a "pine barren basket from New Jersey."

It has proved indeed well worth lingering in these primitive stages of the Industrial art world to appreciate how much has

been done by careful training among the so-called backward nations, as well as to discover how clumsy many a skilled worker may be in seeking to express thought or feeling in the very simplest language. For the summer the club has scattered seeking new adventures, trusting in the fall to welcome a larger number of those, who are in this broad land seeking the same ends. Enquiries may be addressed to Miss E. M. Griswold, 221, Washington avenue, or to Miss Eppendorff, 193 Adelphi street, Brooklyn, N. Y.



SHOP NOTE

We have received a fine new edition of Mrs. C. C. Filkins' catalogue which she is now mailing to her customers.



ANSWERS TO CORRESPONDENTS.

This column is only for subscribers whose names appear upon our list. Please do not send stamped envelopes for reply. The editors can answer questions only in this column.

All questions to be answered in the Magazine must be received before the 10th day of the month preceding issue.

G. K.—Ramikins are small round dishes used for cooking entrées or side dishes—such as lobster a la Newburgh, chicken patties, etc., etc.—the best style of decoration would be a simple border of gold or gold and color.

Mrs. G. A. S.—A good medium for powder colors is made of oil of cloves one part to six parts of oil of copaiba.

A. L.—To etch a design on china the design is first carefully drawn in India ink, then the plate is heated and melted wax is poured over the surface, letting the surplus run off, leaving a thin coat, through which the design can be seen, when the plate is cold the design is gone over with a steel tracer where the glaze is to be eaten away. When the wax is thus removed from the parts to be etched the pure hydrofluoric acid is poured over the design and allowed to remain until it has eaten into the glaze sufficiently, as well as can be judged; hold under running water until thoroughly cleansed, then remove the wax—if some parts are found to be insufficiently etched, the process must be repeated. Avoid breathing the fumes and do not allow the acid to touch the skin as the effect is very injurious.

A. McG.—It does not seem as if either of the vases you illustrate would be very appropriately decorated with the figures. The three-handled one should have some design running vertically and treated with a dark effect, say a black lustre ground with a design in scarlet and green with black outlines, ruby over orange lustre for the scarlet, with light and dark green lustre—say a conventional poppy design with the blossoms coming on the two full curves. The other, rather gourd shaped vase might have the upper part a deep grey blue fading into white clouds at the base with a flight of white birds circling the larger circumference, this would give somewhat the effect of Royal Copenhagen.

Mrs. A. W.—We do not know the green to which you refer, but would rather think the Royal Green in powder would be the nearest to it, it could be darkened by adding Banding Blue or yellowed by adding Albert Yellow or Yellow Brown, according to the desired tone. If your rose is brick red, it has been underfired, even when heavily put on it will not remain that color if sufficiently fired, though it might blister. Carnations always fade more or less in firing—the iron colors are quite inclined to grey especially if touching flues, or paint a little more heavily than you wish the color to be. Overglaze colors are all makes of colors painted on over the glaze—such for instance as you are at present using. In painting naturalistic flowers, etc., it is always best to have a prominent mass and the balance of the painting subordinate and shadowy. If you fire your oil kiln right the chimney never needs cleaning, no more oil should be used than will be consumed in the burner—if smoke comes from your chimney you are using too much oil.

China can not be overfired in an amateur kiln—the colors however fade if fired too hard. China can be readily repaired in an ordinary kiln; it should first be cemented with a cement specially prepared for this purpose, then tied with asbestos cord to prevent it slipping apart in the firing. We will soon give a colored supplement of grapes with treatment for the various kinds by Mrs. Safford. For nasturtiums use Albert Yellow, Yellow Brown, Yellow Red, Pompadour or any of the red or yellow colors. The KERAMIC STUDIO has two studies of these flowers with treatments.

Mrs. C. A. B.—Give your morning glories a wash of Banding Blue over the ruby to make a purple tone. There is no way of which we know to lighten greens when fired too dark, except mixing a little white enamel with green to retouch—this must be done carefully.

The Revelation Kilns

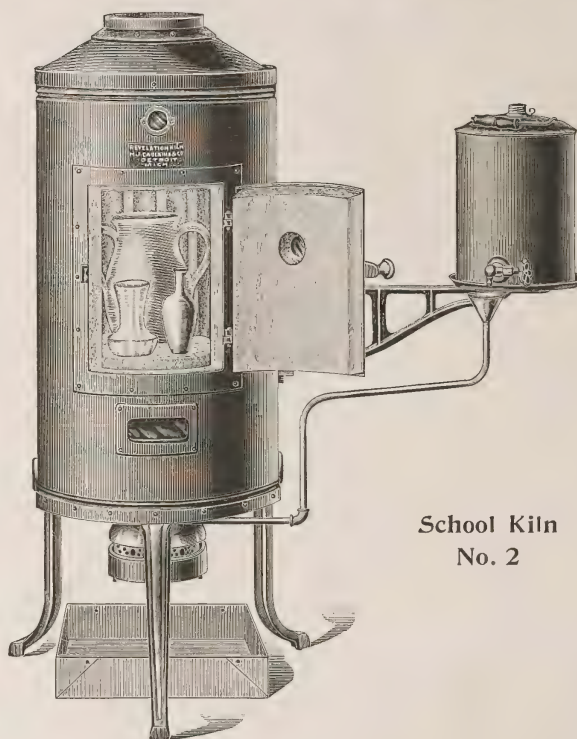
H. J. CAULKINS

M. C. PERRY

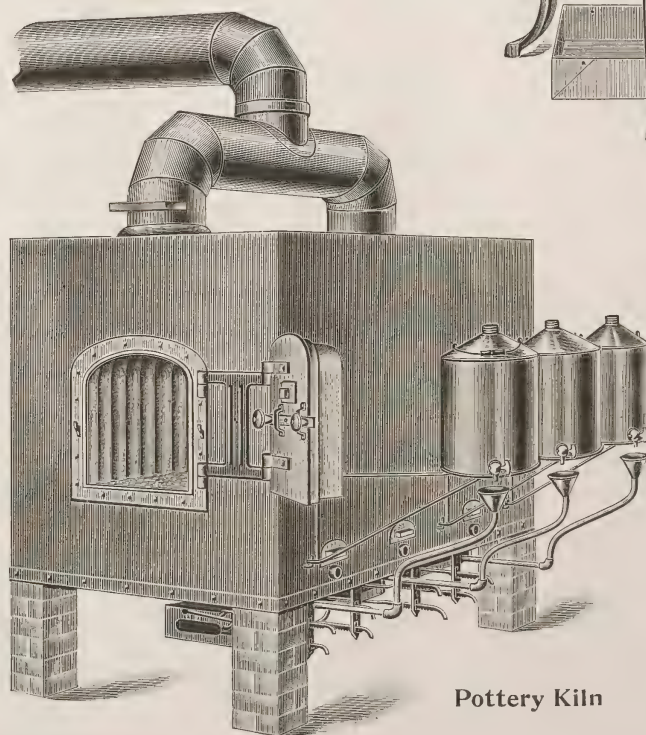
Have You Seen Our New Kiln?

Just the thing for amateurs and home workers. Not a toy, but a practical working furnace. Has every advantage of the larger kilns — fire brick construction, tubular lining, circular oven.

In addition to this, it is the lowest priced kiln we have ever been able to offer, so that it will come within the reach of every China Painter. Write for circular concerning Revelation School Kiln No. 2.



School Kiln
No. 2



Pottery Kiln

Our Pottery Kilns

are built in all sizes from a small crucible furnace for melting fritts and metals up to a biscuit or glost kiln, with capacity for general manufacturing. They embrace many new features which are well worth investigating.

REVELATION KILNS
save labor, time, fuel

No danger; no wood or coal dirt; no fumes or sulphur. We make every kind of a furnace for high heat purposes. Send for one of our catalogues and new circulars containing complete description and definite information.

H. J. Caulkins & Co.
LIMITED

Mfrs of China and Pottery Kilns, Enamel
Furnaces, Dental and other High Heat
FURNACES

KEEP THE FIRE ALIVE

KERAMIC STUDIO

CONTRIBUTORS

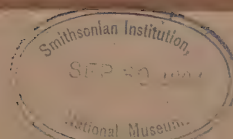
MR. CHARLES F. BINNS ♣ ♣ ♣ ♣
MR. CHARLES BABCOCK ♣ ♣ ♣ ♣
MRS. K. E. CHERRY ♣ ♣ ♣ ♣
MISS MABEL C. DIBBLE ♣ ♣ ♣ ♣
MR. RANDOLPH I. GEARE ♣ ♣ ♣ ♣
MISS LETA HORLOCKER ♣ ♣ ♣ ♣
MR. W. P. JERVIS ♣ ♣ ♣ ♣
MR. ROCKWOOD MOULTON ♣ ♣ ♣ ♣
MISS MARY OVERBECK ♣ ♣ ♣ ♣
MRS. HENRIETTA BARCLAY PAIST ♣
MRS. A. A. ROBINEAU ♣ ♣ ♣ ♣
MR. F. H. RHEAD ♣ ♣ ♣ ♣
MRS. EDITH ALMA ROSS ♣ ♣ ♣ ♣
MISS HARRIETTE R. STRAFER ♣ ♣ ♣ ♣
MRS. ALICE WITTE SLOAN ♣ ♣ ♣ ♣
MISS ALICE B. SHARRARD ♣ ♣ ♣ ♣
MRS. SARA WOOD SAFFORD ♣ ♣ ♣ ♣
MISS LUCIA SOULE ♣ ♣ ♣ ♣
MRS. BELLE BARNETT VESEY ♣ ♣ ♣ ♣
MISS MADGE E. WEINLAND ♣ ♣ ♣ ♣
MRS. MARIE CRILLEY WILSON ♣ ♣ ♣ ♣
MRS. CARRIE E. WILLIAMS ♣ ♣ ♣ ♣

OCT. MCMIV

Price 35c.

Yearly Subscription \$3.50

A MONTHLY MAGAZINE FOR THE POTTER AND DECORATOR



CONTENTS FOR OCTOBER 1904

	PAGE
Editorial	121
Brush Work—Lessons No. 2 and 3	W. P. Jervis and F. H. Rhead 121-122
American Gres	Charles F. Binns 123
Studio and Club Notes	124-128
Pussy Clover	Leta Horlocker 124
Primrose Study	Carrie E. Williams 124-125
League Notes	Belle Barnett Vesey 126
Treatment of August Supplement—Plate by	Marie Crilley Wilson 126
Design for Breakfast Plate for Country House	A. A. Robineau 126
Game Plate	Alice Witte Sloan 127
Syrup Pitcher	Charles Babcock 128
"Dawn" (Supplement)	Harriette R. Strafer 129-130
Larkspur Design for Cup and Saucer	Alice B. Sharrard 131
Design for Jardiniere—Conventionalized Jimson-pod	Mary Overbeck 132-133
Modern Pottery of East India	Randolph I. Geare 134
Pansies—Treatment of September Supplement	Sara Wood Safford 135
Tiles	Rockwood Moulton 135
Plate	Mabel C. Dibble 136
Blue-Eyed Grass	K. E. Cherry 137
Cherry Border for inside of Fruit Bowl	Lucia Soule 138
Fish Design	Henrietta Barclay Paist 138
The Crafts—Raffia Waste Paper Basket	{ Madge E. Weinland 139-140
Raffia Pillow	
Silver Bell and Spoons	Edith Alma Ross 141
Deerfield Arts and Crafts Society	142
Answers to Correspondents	142

Some Leading Agencies of Ceramic Studio

We take pleasure in mentioning a few of the leading agencies for the sale of the KERAMIC STUDIO, where, also, subscriptions may be placed:

Boston, Mass.—Miss E. E. Page, 236 Boylston St.; Smith & McCance, Old Corner Book Store.
 Brooklyn—A. D. Mathews & Sons, Fulton Street.
 Buffalo—Mrs. Filkins, 609 Main Street.
 Chicago—A. C. McClurg & Co., Brentano's; Burley & Co.;
 Cincinnati—Miss M. Owen, 245 Elm Street; A. B. Closson, 4th Street near Race; Traxel & Mass, 4th Street, near Elm.
 Cleveland, Ohio—Vinson & Korner, 150 Euclid Ave.
 Columbus, Ohio—Lee Roessler, 116 So. High Street.
 Dayton, Ohio—W. W. Kile & Co.
 Denver, Colo.—E. Meininger, 807 16th Street.
 Detroit, Mich.—L. B. King & Co.
 Hartford, Ct.—E. M. Sill.
 Grand Rapids, Mich.—Miller, Wolfe Co.
 Indianapolis, Ind.—Keramic Supply Co., Lemecke Building.
 Kansas City, Mo.—Emery, Bird, Thayer Co., Geo. B. Peck Co.
 Louisville—Louisville Book Store.
 Minneapolis, Minn.—Minn. Art China Co., 607 1st Ave. So.

New York City—Brentano's, Union Square; M. T. Wynne's, 11 E. 20th St.; The Fry Art Co., 36 W. 24th St.; Wanamaker's; American News Co. J. B. Ketcham, 107 W. 25th Street; M. J. Whaley, 430 5th Ave.
 Newark, N. J.—Keramic Novelty Co.
 Oakland, Cal.—Smith Bros.
 Omaha, Neb.—Megenth Stationery Co.
 Philadelphia—Wanamaker's.
 Pittsburgh, Pa.—Otto Schaffer & Bros.; Kurtz, Langbein & Schwartz; R. S. Davis & Co., 346 Fifth Ave.; John G. Yergan, 36 Fifth Street.
 Reading, Pa.—Rowland's Book Store.
 Saratoga Springs—Robson & Adea.
 San Francisco—Mrs. M. E. Perley, 207 Post Street.
 Sioux City, Ia.—J. K. Prugh, 312 Nebraska Street.
 St. Louis—F. Weber & Co.; A. S. Aloe & Co.
 Syracuse—Wolcott Book Shop; Welch & Hollingsworth; W. Y. Foote; A. L. Varney & Co., 336 S. Salina Street.
 Tacoma, Wash.—Art Exchange, Mrs. Mead.
 Toronto—The Art Metropole.
 Warren, Pa.—Alzora Bashline.
 Washington, D. C.—Woodward & Lothrop.
 The Magazine may also be ordered from any news dealer or book store in this country, who can procure it through the American News Company New York, or its branches.

KERAMIC STUDIO

Vol. VI, No. 6

SYRACUSE NEW YORK

October 1904



THE Annual Fall Competition closes the 15th of October. If the results are such as we are encouraged to expect our subscribers may look for a fine Christmas number of *KERAMIC STUDIO*, specially illustrated with a view to the many things which can be made and decorated for the Christmas pleasure of the little ones, as well as "grown-ups." There is a particularly attractive atmosphere in the work done for children in these latter days, whether it is that the saying "The child is father to the man" is being better understood and we realize that in doing artistic things for them we are furthering a more rapid development of the art than in catering to those who are already at the zenith of their ability to develop or whether it is we realize more, that in simplifying things to the understanding of these little ones, we are really touching the key note of all that is truly artistic.

Things that are simple, symbolic and useful are the lasting and truly beautiful and will give the touch of character in future ages to our own art status as do the ancient art expressions of Greece and Egypt.

Speaking of Grecian and Egyptian art, in a ramble the other day, through the Metropolitan Art Museum and the Museum of Natural History at New York, it was curious to note in the work of the ancient Peruvian and other South American Indians as well as in many northern tribes, a marked resemblance between the better work of the potters of both old and new worlds, and where these forms and motifs and modes of decoration approach most closely, one notes the fact that the forms are the most simple and treatment most appropriate to their use. The so-called Greek fret is found every where in a modified form, that is a coincidence to which we have all become accustomed, but it is strange to find shapes and modes of attaching handles and schemes of spacing alike, as well as certain treatments of things used for similar uses. It only goes to prove that there is but *one right way* after all.

✧

Our stock of good naturalistic studies in black and white is running rather low. We would be glad if our readers would send to us any good studies they may have of flowers, fruit, nuts, seaweeds and shells, etc., etc. We will give them our earnest consideration and will purchase all that are suitable for reproduction.

✧

The treatment for the plate design of Marie Crilley Wilson and the Pansy study of E. Louise Jenkins will be found in this issue of *KERAMIC STUDIO*. The delay in giving the treatments was unavoidable as Miss Jenkins is in Europe and Mrs. Wilson was also absent from home.

✧

The New York Society of Ceramic Art has changed the time of its annual exhibition to the spring when most of the regular art exhibitions take place. We think this a good idea, but trust that they will also hold a sale at Christmas time for the sake of the patient pocketbook which is seldom plethoric among china decorators as in all other paths of art.

BRUSH WORK

W. P. Jarvis and F. H. Rhead

*LESSON 2. (CONTINUED)

FIG. 10 and 12 are lessons in making forms composed of more than one stroke. The honeysuckle in No. 10 is done by making the centre stroke first, then the left side and finish with the right side. These could be done in colors, using two colors for No. 10 and three for No. 12. (In numbering the examples No. 11 was accidentally omitted.) For No. 13 a good color scheme would be gold, dark blue and red, making a conventional Crown Derby pattern. Use dark blue for the horizontal lines, the other shapes in red and the wavy lines and handle in gold. No. 14 would work out well with the petals in red, the bands and stems in green, and gold handle. For No. 15, paint the spots and horizontal line in orange, the leaves in sage green, flowers violet, with the handle, foot line and edge in gold. No. 16 may be done in any quiet coloring, painting the handle in the same color. This cup would make a nice contrast if the wall paper were considered. If the paper was a warm amber or warm dark green, do the pattern in turquoise on white. Should the paper be a cold green or blue, do the cup in coral red or rich yellow, or in violet if the paper is orange. For further practice make simple designs for three shapes of cups or vases, with designs made of single strokes.

LESSON 3.

As this lesson deals with natural forms it will be well to abandon the sepia and substitute a warm green. Fig. 1 is a simple spray entirely formed with the first stroke. Fig. 2 shows the fibres in a lanceolate leaf and is a combination of the same stroke. Fig. 3 is formed by using the second stroke. Figs. 4 and 5 show the method of drawing leaves with ceration, each ceration being formed by a separate brush stroke, the one running into the other, the last under stroke in Fig. 5 forming the centre fibre. Fig. 6, grass or any linear lanceolate leaf is formed with two strokes of the brush. Figs. 7 and 8 show two different methods of treating leaves, one as a solid form and the other breaking it up into fibres. No. 8 looks a little difficult, but by first drawing in—always with the brush—the main fibres and so practically breaking it up into small sections, it becomes much less complicated than it looks. Figs. 9 to 15 are simple floral arrangements which may be treated in natural colors and must be drawn with the brush without any pencil lines. Fig. 9 for instance may be treated with the heads of the bulrush in dark brown, stems straw color, leaves dark green. In Figs. 11, 12, 13, 15 paint the flowers first, then the stems and finish with the leaves, being careful to have the stem of a graceful shape. A number 5 brush should still be used for the finest lines. It is excellent practice to draw fine lines with a large brush. Always consider the line of the stem when drawing leaves.

For further practice make one or two treatments in brush work of any small plant or weed. Some of these latter are extremely beautiful and decorative. From these natural drawings make a design for a 6 x 6 tile, as simple an arrangement as possible and all done with the brush. Use three colors for this.

*Figures referred to in Lesson 2 are shown in September issue.



AMERICAN GRES

Charles F. Binns



THE articles by M. Doat will doubtless have the effect of stimulating the studio work of the American artist-potter and if the learned Frenchman should succeed in inducing native enthusiasts to devote themselves to at least one branch of *grand feu* work he will have deserved well of the country. The point upon which American crafts-

men need light is that of the native clays. It is manifestly impracticable to import the French clays and there is no need, for clays of every type exist in great abundance in the United States. The composition of the paste for grès differs from that used for porcelain mainly in the fact that the former is nearly, if not quite, a natural clay while the latter is a mixture more or less elaborate. The chemical analysis, however, of a grès paste would not greatly differ from that of a porcelain. The main point of divergence would be the amount of iron contained. The porcelain paste contains less than one per cent., the grès often as much as two per cent. or even more. A fragment of pure kaolin will bear an intense heat without losing its porosity. It is of such a refractory nature that the porcelain fire would not suffice to produce translucency. It is therefore necessary to make an addition of some fusible mineral to the paste in order that the desired vitrification may be secured. The mineral almost exclusively used for this purpose is feldspar of which a porcelain paste contains from 15 to 30 per cent., according to the heat which it is to undergo. A natural porcelain paste, white and containing the requisite amount of fluxing material, does not exist—except for the alleged natural porcelain in Japan—and it must therefore be artificially produced. This is done by mixing the proper proportions of kaolin, feldspar and quartz, having due regard to the fire it is proposed to use and to the nature of the result required.

The clays used for grès contain exactly the ingredients which kaolin lacks but they are unsuitable for porcelain because they do not become white in the kiln. The manufacture of grès belongs then to the category of coarse or natural wares and it is the more to the credit of the successful artist who takes this crude material and fashions it as he will.

The characteristics of a clay suitable for grès are not hard to ascertain but it will be necessary to consult a chemist if reliable information is sought. The first point to consider is the fluxing content. There are several of the constituents of a clay which contribute to its power of vitrification. Iron, lime, magnesia, potash and soda all occur in clay and each is, under certain conditions, a flux. Kaolin, feldspar and quartz as used in porcelain contain only potash and soda as fluxing ingredients, sometimes only one of these but more often both, therefore an endeavor should be made to find, in a clay to be used as grès, the amount of fluxing material which shall be equivalent to that found in porcelain. This of course presupposes that the same fire is to be used in each case but as a matter of fact the fire undergone by porcelain is usually much more severe than that to which grès is subjected. The reason for this is in the endurance of the clay.

The shortest and most accurate way to compare the composition of porcelains and grès is by means of the analysis. In a work on Ceramic Technology published in London by the writer, certain analysis of typical porcelains are given, among which are the following:

	Meissen	Limoges	Chinese
Silica	58.50	70.20	69.00
Alumina	35.10	24.00	23.60
Lime	.30	.70	.30
Magnesia	trace	.10	.02
Iron	.80	.70	1.20
Alkalies	5.00	4.30	6.20

Now, the question is, "Can any single clay be found in America which shall closely approach any one of these compositions?" Here are some native fire clays:

New Jersey New Jersey Pennsylvania.

	New Jersey	New Jersey	Pennsylvania.
Silica	65.85	65.70	63.43
Alumina	29.48	28.97	30.23
Lime
Magnesia
Iron	.85	1.55	1.38
Alkalies	3.47	3.75	4.91

The chemical resemblance between the porcelain pastes and the natural clays is quite remarkable but this does not of necessity mean similar behavior. One of the most important factors in a clay, as governing its point of fusion, is the size of the grain. A clay containing coarse sand will, other things being equal, be much less fusible than one in which the sand is fine. There is also the question of color. It may, in fact, be said that the main difference between a porcelain paste and a grès clay is the color. Nor is this color wholly dependent upon iron as some have supposed. For example, the Chinese paste contains more iron than the first clay given and yet it is very much whiter. There is no chemical reason, so far as present knowledge goes, to account for the subtle changes of color in clays, especially in clays which are nearly white. Nothing but experiment will determine the point.

There is, therefore, no difficulty in procuring native clays which are suitable for the manufacture of grès. In fact any of the clays which are used in the production of sewer pipes, stoneware or low grade fire brick will prove suitable. The requirements are a slightly sandy grain, a good plasticity and a point of vitrification about cone 8. This is rather low for the best grès which are fired nearly to porcelain heat. In fact a brilliant glaze of the true porcelain type cannot be fused much below cone 12.

Grès clays can be well worked on the wheel, in fact most stoneware clays are shaped in this manner to some extent. In the preparation of the clay for careful work some pains must be taken, for a badly prepared clay will cause serious losses. All these clays are liable to contain small nodules of either iron carbonate, iron sulphide or lime carbonate. These may be as small as the head of a pin but if they lie in the ware unnoticed they will become "poppers" after firing or cause blisters during the fire. The effect of these "poppers" is to blow off small fragments of the pottery and, of course, after a piece is decorated it may be entirely ruined by such action. The remedy is always to make the clay into slip and to strain it through as fine a sieve as it will pass. Through 100 mesh is best, but some of the sandy clays will not pass this, in that case a sieve of 80 meshes to the inch must suffice. If the slip be made thin it will pass the more freely. It can then be allowed to stand until thick and dried to plasticity in plaster molds. The glaze for these clays is about the composition of Seger cone 4 of which the formula is:

K ₂ O	.3	Al ₂ O ₃	Li ₂ O
CaO	.7	.5	4.0

and the mixture:

Feldspar	42	Flint	27
Whiting	18	—	—
Kaolin	13	—	100

This glaze may be applied upon the unburned clay. If it does not agree in shrinkage with the particular clay chosen the kaolin may be decreased or a little ball clay may be substituted for some of the kaolin. Ball clay shrinks more than kaolin.

If the ware be first burned the clay will be a disadvantage as tending to cause the glaze to crack. In that case the kaolin should be first calcined and then ground and a little mucilage should be added to the glaze. The glaze is designed to stand a reducing fire for it is this fire which imparts the pleasing tones to the grès.

The clays mentioned above may be procured in quantities, not less than a barrel, from Mr. W. H. Cutter, Woodbridge, N. J. and Messrs. H. C. Perrine & Sons, South Amboy, N. J. They go by the name of stoneware clays. Those residing in the West can find abundance of similar clays in Ohio and Colorado.

STUDIO NOTES

We are in receipt of an interesting little booklet from the Emma Willard Art School of Troy, N. Y. It is fully illustrated with the work of various pupils in drawing and design.

Mrs. L. Vance-Phillips is having a class for a few weeks

at St. Louis at the business house of A. S. Aloe & Co. She will be in her New York Studio again at the end of October.

CLUB NOTE

The New York Society of Ceramic Arts will have its Annual Exhibition in the spring instead of the usual one in December.



PUSSY CLOVER—LETA HORLOCKER



PRIMROSE STUDY.

Carrie E. Williams

PAIN'T in the background using Copenhagen Grey, Peachblossom and Yellow near the blossoms shading into violet Purple Black with a little Ruby in darkest portion.

The flowers are painted in the lightest parts very delicately with peach blossom using Violet and Yellow in the shadows.

The shadows ones with Peachblossom and Purple Black centers, Lemon Yellow shaded with Brown Green. Leaves, Lemon Yellow, Yellow Green, shading-green and Purple, Black. Stems, Yellow Green, Ruby shading Green and Purple Black.

In the second painting use the same colors and strengthen where necessary.



PRIMROSE—MRS. CARRIE WILLIAMS

LEAGUE NOTES

WE are pleased to have the study course before the clubs in time for their first Fall meeting. Letters, expressing satisfaction, already have reached us, with promises to work out the entire seven problems. Each problem will have its own special charm and innate art lesson, conducive to self art growth, beside adding desirable pieces to our studio shelves.

We have observed that they who are the most enthusiastic, have mastered the governing principles of art, and, in directing pupils along those necessary lines, have realized unexpected financial success. It has been demonstrated, that our public school children are as quick to master classical music as so called "rag-time." So in art, an appreciation of the best, is as easily acquired, as a cheap imitation.

Let nothing discourage us. While the potter has been likened poetically to a conjurer with magic art, we know, that only the magic resulting from toil—serious, ceaseless toil—can accomplish material results. If no wheel or professional potter, stands waiting to help us, let us follow Prof. Binns' recent articles in the *KERAMIC STUDIO*. Two National League officers expect to make the jar, Problem 3, in that way. Problems 2, 4, 5, 6 and 7, are possible to all our members, being practical, overglaze decorations. Designs for 5 and 7, we are glad to learn, are provided by our committee, and need cause us no anxiety. To us they are only overglaze propositions.

Let us not wait for inspiration, or occult demonstration, or until "the spirit moves us," as artists and musicians are prone to do, and then have nothing to send at exhibition time. Let us have good, plain, frank interpretations. Let us be original—genuine.

"Have faith in nothing but industry. Be at it late and early. Persevere and work right on through censure and applause or else abandon art."

September issue *KERAMIC STUDIO* contains the study course.

BELLE BARNETT VESEY.



TREATMENT OF AUGUST SUPPLEMENT

Marie Crilley Wilson

FORMULA for enamels:—*Edge Dark Blue*, made of Lacroix—dark blue, a touch of black, $\frac{1}{8}$ Aufsetzweis, very little flux. *Dark Green*—Apple green (a touch), mixing yellow, brown green, black (a little), $\frac{1}{8}$ Aufsetzweis, a little flux. *Light Green*—Equal parts apple green and mixing yellow, a little black, with this color, *body enamel* made of $\frac{3}{8}$ Aufsetzweis, $\frac{1}{8}$ Hancock hard enamel, $\frac{1}{8}$ flux. *For Light Grey Blue*—Deep blue green, a little apple green, a touch of black, add this to *body enamel*.

Edge of plate wavy blue portion nearest the edge and upper portion of flower are made of the *Dark Blue*. Lower portion of flower and inner band of *Light Grey Blue*. Upper wavy green band and wavy green portion nearest band are of *Dark Green*. Small green stems and inner band *Light Green*. Center of flower, Yellow Brown and a little Black.



DESIGN FOR BREAKFAST PLATE IN BLUE AND GREEN FOR COUNTRY HOUSE—A. A. ROBINEAU



GAME PLATE—ALICE WITTE SLOAN

GOOSE white outlined in grey. Plane of water tinted light blue with lines in dark blue. Or else, lines may be omitted, the water simply shaded in directions indicated. Background above design to be left white or else tinted light grey

or light yellow. Goose may also be grey, outlined in dark grey or black. The narrow border should be in dark blue. The white portion could be tinted same shade as water in the broad design.



SYRUP PITCHER—CHARLES BABCOCK

These designs for syrup pitcher are for tinted panels on a white ground, the decoration to be in gold and black or gold and red with a touch of some darker color or colors harmonizing with the tint.

CLUB NOTES

The first regular meeting of the Chicago Ceramic Art Association for the season of 1904-5 will be held at the Art Institute, October 1st, when the officers for the current year, as elected at the last regular meeting of the Association held in May, will be installed as follows: President, Mrs. Mary J. Coulter; First Vice-President, Mrs. Almira B. Ryan Second Vice-President, Miss Minnie C. Childs; Recording Secretary, Mrs. Lula C. Bergen; Corresponding Secretary, Mrs. Laura Norton Starr; Treasurer, Miss Brideen T. Kavanaugh; Historian, Mrs. John C. Long.

The growing interest which the study of design has given to a higher standard all over the world has made many dubious about attempting work in a new line but we feel we must enter upon this work with more enthusiasm than heretofore and at the next meeting of the club a course of study will be adopted. The members are looking forward to this contemplated line of work with a great deal of anticipation.

LAURA NORTON STARR,
Cor. Secy. C.C.A.A.

❖ ❖
"DAWN" (Supplement)

TREATMENT FOR WATER COLORS

Harriette R. Strafer

MAKE a very faint outline in lead pencil, indicate the drapery by a line here and there, suggest the horizon and clouds by very faint lines. Use a medium smooth piece of Whatman's water color paper, thoroughly wet the paper on both sides. Lay perfectly flat over a wet blotter or piece of muslin cloth and paste down the edges to the drawing board, smoothing the surface with a dry cloth to take out wrinkles and to take off the surplus water. Cover the entire surface of the picture with a wash of light yellow. For the flesh tone use Indian Yellow and Light Red, or if greater permanency is desired use Aureolin Yellow. For the shadows use Indian or Light Red, and Cobalt Blue with burnt Sienna in the darker parts, and with Yellow in the reflected lighter places. Lay on the shadows with a full brush of color and blend with another brush, filled with clean water, which you must keep ready for use. Put the shadows in the drapery with Purple and Greenish tones, going over the lights with Yellow. Paint the sky with a good wash of Aureolin Yellow, shading into orange, touch in the clouds with purple while the paper is still wet. Let the sky run down into the background, and paint in rich purples and green, with touches of burnt Sienna, Orange Cadmium and Crimson. Work the colors with plenty of water one over the other until a rich deep effect is produced, intended to represent twilight. Go over the flesh with Rose Madder and Yellow, where needed, blending in with the background color.

The whole picture should be finished before the paper is thoroughly dry with the exception of a few sharp touches in the drapery, and a little white which can be used in the lights of the drapery.

In the picture the flesh tone has been printed a little too pink, especially in the bust, and in the original the drapery covers the bust and upper part of the body in light filmy folds which have been lost in the reproduction. Making the background deeper in tone and supplying the drapery across the bust will improve the picture.

TREATMENT FOR MINERAL COLORS

This is a very interesting study for decorative purposes and when the full figure is not desired the head with a bit of the fine background makes a very effective round or square medallion. In the process of reproduction the shading on the

bust was lost somewhat thus giving an effect of greater fullness than is desirable, also the red in the flesh was too strongly used; remember these two points in copying the figure and you will be well pleased with the result.

First make a careful tracing of the figure on a gelatine tracing paper, making all lines dotted, marking on the dark side of edges. Fix this in position on your piece of China with two pieces of gummed paper at the top, so that the tracing can be lifted to see if it is correct. Take a piece of light brown wrapping paper about two inches square; rub a little of the medium well into it. Then take a soft lead pencil and blacken it well. This can be used from time to time by rubbing afresh with a very little medium on a rag. Slip paper under the tracing, the blackened face to the China, and go over the tracing with a steel or ivory tracer, moving the leaded paper from place to place as your progress, looking beforehand to see if all the drawing in that section has been traced. When the outlines are transferred to the China in this way, take a fine liner and go over the drawing with India ink. Remember to make all lines dotted so that you can see if all color is well blended and no hard lines left at edges. Now wash off your china with spirits of turpentine, and you are ready to begin to paint.

Now cover the background with a thin wash of medium, padding lightly with finger to make it even. Use spirits of turpentine in your brush with medium. Take your large square shader and brush tender shadow into the background all over. Into this work Albert yellow, yellow brown, blue green, violet and finishing brown. Take your largest stippler and blend one color into another, working from the yellow into the blue. This will make a rather bright background for the first fire which will be toned later. When this is sufficiently blended, wipe off the figure, drapery, &c., so that they will be free from color, with the exception of a little left over the edges of the hair. If you are a beginner, it will be safer now to dry the china over an alcohol lamp or in the oven, to keep safe from dust or rubbing with the fingers.

Now treat the figure with medium, as in the background, padding even with finger. Take your largest miniature brush and paint over the parts in light with local flesh No. 1, over the parts in shadow with reflected light, and break in the half tones between light and shadow with tender shadow. Put Pompadour No. 2 in cheeks, ears, tip of nose, chin, finger tips and all rosy parts. Work rapidly and lightly and do not try to blend smooth. Put tender shadow on eyebrows and wherever the flesh and hair meet. Now take your fourth size stippler and go lightly over flesh until blended softly stippling the clear flesh first, then the tender shadow, and last the reflected light. After this is pretty well blended, take a smaller stippler and model the form, taking out the high lights. If the color seems to blend off too freely, wait a little till it dries somewhat. The beginner can stop here with the flesh before firing, if she does not dare to work over the flesh. Of course the features will have to be worked up somewhat as described later. The more advanced can now take a No. 1. or No. 2 miniature brush and strengthen the shadows on the light side of face and figure with tender shadow, on the shadow side with cool shadow, a little more Pompadour 2 in cheeks if necessary. Make the brush strokes follow the forms of the muscles. Stipple lightly immediately after laying in color to avoid hard lines. After the figure is modeled as well as possible in this way, take finishing brown 1 and paint in eyebrows, eyelashes and eyes, stippling to avoid hard lines. Put a little cool shadow on eye balls, and take out high light with cotton on the end of a pointed stick. Work up the mouth with pompadour 1, breaking the edges and corners of mouth with

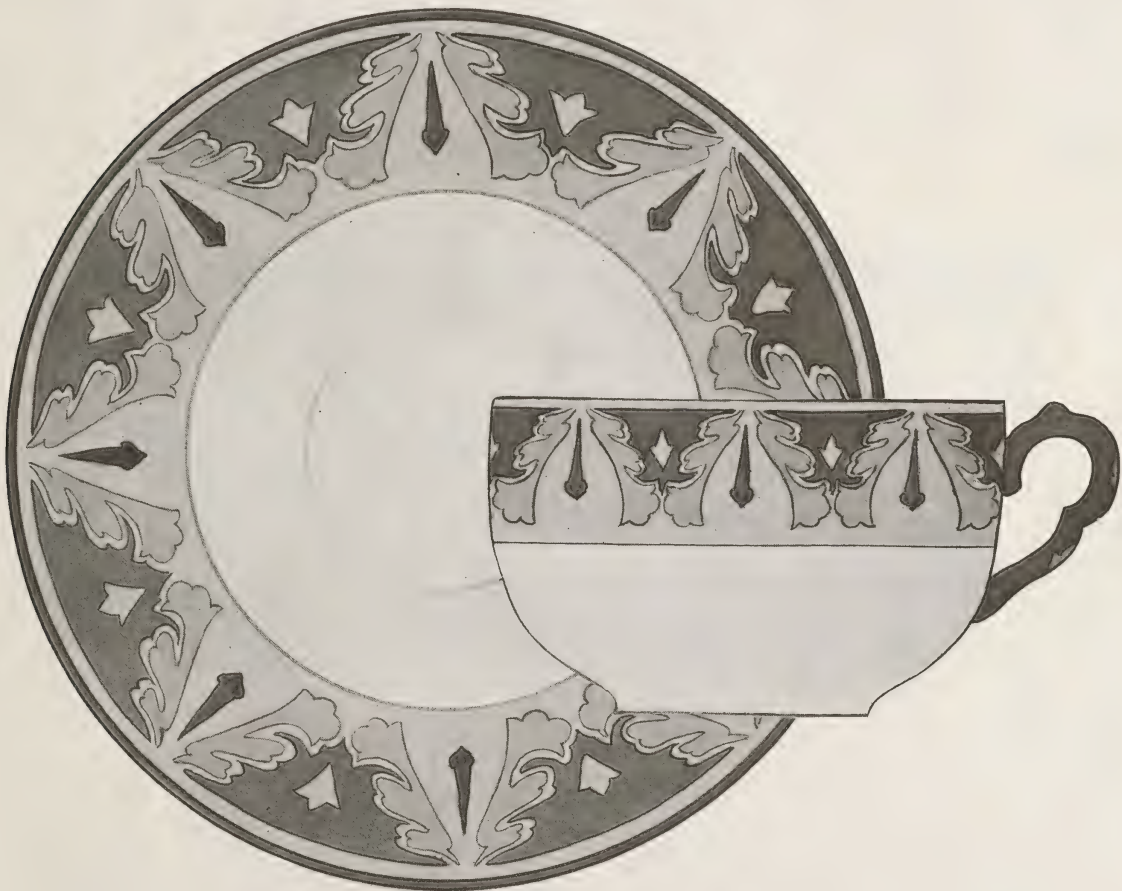
CANADIAN HANDICRAFTS

A NEW and very interesting feature of the Canadian Pavilion at the World's Fair is the exhibition of handicrafts from Quebec, the work of French-Canadian women of the rural districts. Homespun woolens and linens, portieres, woven in a decidedly unique manner, besides Indian beadwork, porcupine quill embroidery, and rush mats, and rush-seated chairs are shown. Fine honiton and point laces from English and Irish settlers of that province are exquisite both in pattern and execution. The Doukhobors and Galicians have contributed much that is artistic in embroideries and drawn linen.

The Canadian Government is lending valuable assistance to this work which was taken up by the Women's Art Associa-

tion of Canada for the purpose of keeping alive interest in all industry within the Canadian farm home, which gives the women a chance to earn some money that will be their own, instead of forcing the young members of the household out into factories and other institutions, where the hours are long and the salary small. The association has taken hold with a firm hand, and hopes to be able to prevent Canadian home arts—those brought to the Dominion by immigrants and those distinctly aboriginal—from disappearing.

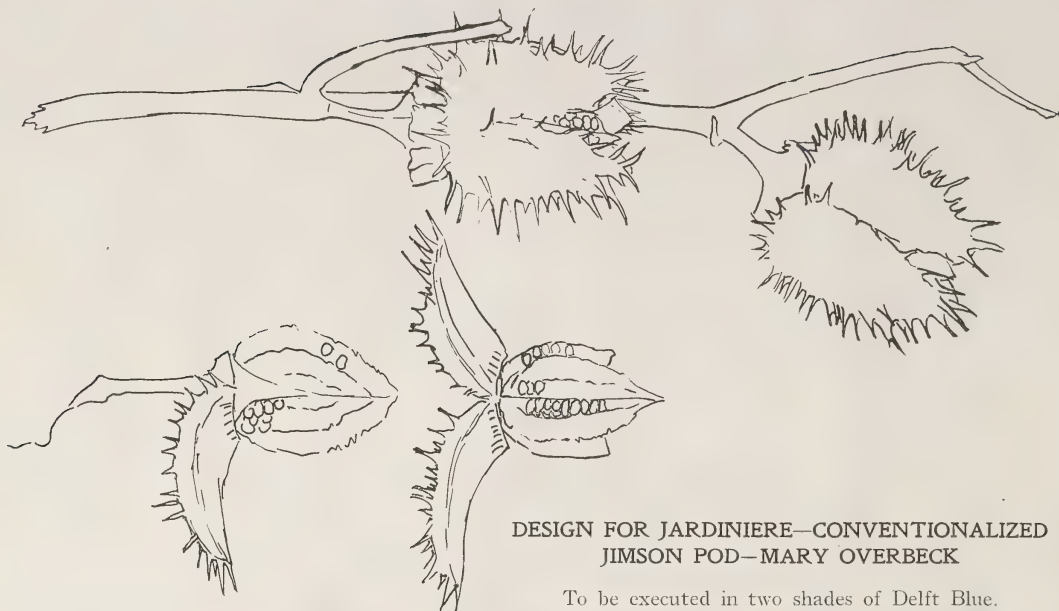
In one of the large rooms upstairs the walls are hung with beautiful portieres and a large table is weighted down with very handsome gown lengths of woolens and linens, and dainty bits of lace and table linen are also conspicuous.



LARKSPUR DESIGN FOR CUP AND SAUCER—ALICE B. SHARRARD

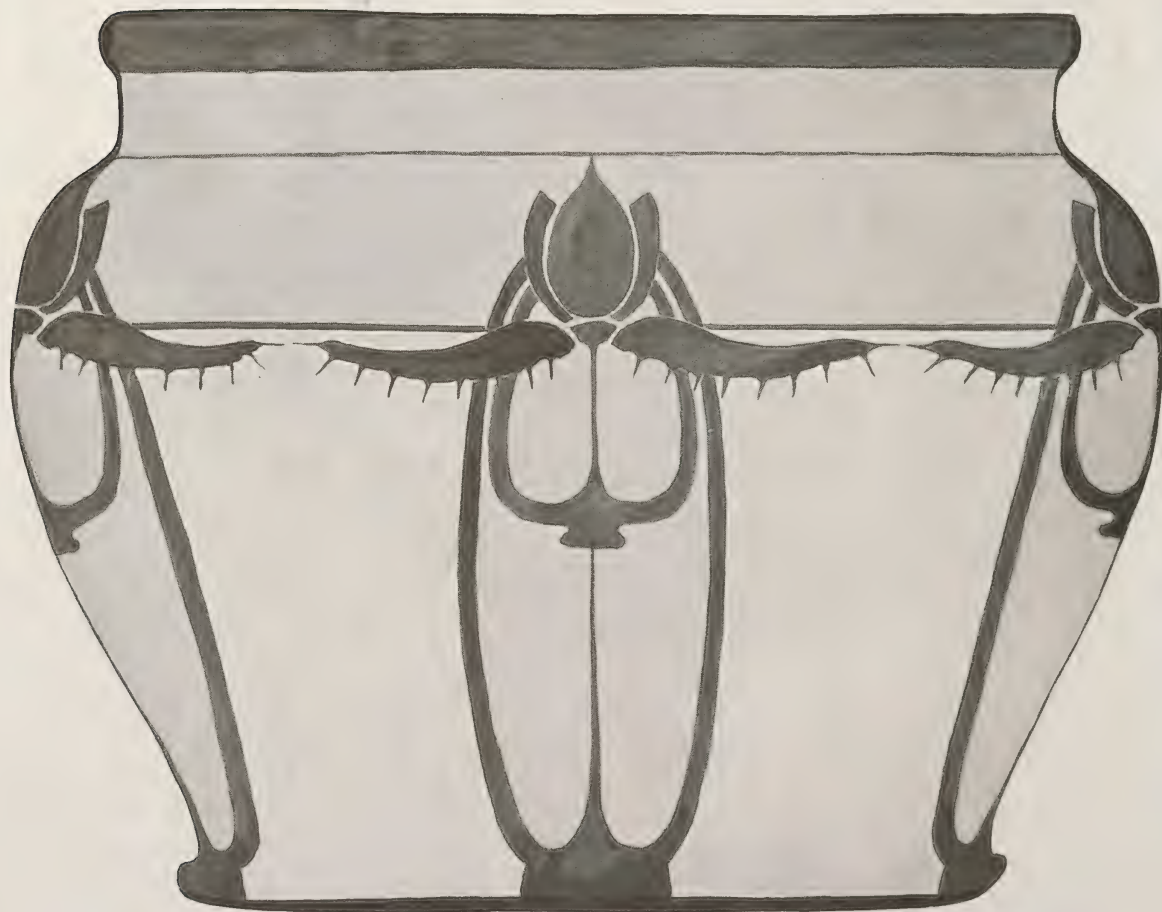
A GOOD color for this border is Rose for grounds, the delicate pink combined with gold makes a pleasing decoration. Paint the lighter portion of the design with a wash of the color, using a shade darker for the figure forming the back-

ground. Outline all in black, filling in the narrow bands with gold. The small white figures may be of gold also. Or the dark part of the design may be gold, if desired, using Rose for the remainder.



DESIGN FOR JARDINIÈRE—CONVENTIONALIZED
JIMSON POD—MARY OVERBECK

To be executed in two shades of Delft Blue.





JIMSON POD—MARY OVERBECK



1. Sweetmeat jar. Khurja. 2. Pipe-bowl, unglazed clay.
3. Jar. Sind. Roughly glazed earthenware. 4. Bowl. Rampur.

MODERN POTTERY OF EAST INDIA

Randolph I. Geare

THIS pottery may be divided into two general classes: (1) the native undecorated pottery, which is made everywhere in India from the Himalayas to Ceylon; and (2) the decorative wares, including such as those of Sind, Multan, Delhi, Rampur, etc.

The native pottery is of a very simple kind, being intended for domestic use only, but the outlines are perhaps as beautiful as in any pottery in the world. The makers use the old wheel—ancient as the hieroglyphics of Egypt—while the still older method of beating out vessels of clay with a flat piece of wood, as in Northern Africa, the Fiji Islands and many other savage or semi-savage regions, is also maintained. With these simple appliances, however, the natives—as already intimated—obtain a purity of form unsurpassed by even the most elaborate processes. It is not with this crude class of East Indian pottery however, that the special interest of the majority of people lies, but rather with the sumptuous decorated wares turned out by the celebrated establishments maintained in the provinces and cities above mentioned, among which Sind occupies a prominent position; and also to some extent by the Schools of Art in Madras, Bombay, and other parts of the Empire.



Plate (Yatta). Sind. Diameter 10 inches.

The Sind pottery which probably dates from about the thirteenth century, is a red earthenware, usually covered with a coating of some finer clay, worked into a paste and applied wet. It has a thick but transparent glaze, not alto-

gether unlike the Italian majolica. Persian influences are strongly apparent both in the shapes and colors, and indeed the manufacture of Sind pottery is said to be actually due to the presence of colonies of Persians there at one time. The more common colors are a bright and strong green, yellow or brown, yellow on black, and also a turquoise blue. The oldest examples often have a fine iridescence.

The Multan pottery partakes still more of the Persian character, a fact readily accounted for by the nearness of that city to the Persian border. Here the earthenware is red or yellow, while the extra coating of fine clay (or "slip") is decorated with bold diaper or floral patterns in different shades of blue, giving the ware a richness unattained by any other in India. Sometimes a light fawn color is used with the blues. Following the Persian form of decoration, a favorite design is the tulip.

Delhi ware is made from a siliceous artificial clay. It has a thin glaze, but the colors, which are of great beauty, are applied direct, without the coating of fine clay common to the Sind and Multan wares. The ornamentation is thoroughly Persian in character.



Bottle. ("Serai.") Delhi. Height 12¼ inches.

Jeypore ware is similar in many respects to the Delhi product, being also made from an artificial clay, although the colors and style of decoration are in the best examples decidedly superior. This ware is often made in large and conventional forms, with a combination of deep blue and dark green. It has been much imitated in recent years, and the results are, as usual in such cases, of a deteriorated quality.

Other notable kinds of Indian pottery include that made by Abdul Majid of Khurja, the red earthenware of Ferruckabad, and the painted clays of Lucknow.

The Ceylon ware furnishes an interesting study. The island was converted to Buddhism only about a century after the expulsion of the army of Alexander the Great, and that religion has been retained to the present day. Hence there is apparent in the pottery of that island considerable evidence of that Greek influence which was so powerful in early Buddhist art. Much of the painted ware is said to be very crude, due perhaps to European influence in Ceylon; but there is a class of red earthenware with incised patterns of quite high standard and conspicuously Greek in feeling. It is this ware that repre-

sents more nearly than any other the local art unaffected by foreign influence.

The glaze used in some of the Indian Schools of Art is made of white quartzose rock (twenty-five parts), pure soda (six parts), pure borax (three parts), and a little sal ammoniac. When finely powdered, these ingredients are mixed with water and made up into balls about as large as oranges. These are heated, cooled down, ground and sifted. The material is then placed in a furnace, and when melted, clean-picked saltpetre is stirred in, resulting in a foam on the surface, which is skimmed off and set aside for use in glazing.

Oxides of lead, tin, zinc and copper supply the colors.

TREATMENT OF PANSIES

(September Supplement by Miss Jenkins)

Mrs. Sara Wood Safford

IN the first painting use Pearl Grey and Violet for shadows in white pansies, Yellow and Violet in shadows of yellow pansy and Yellow Brown and Violet in deeper shadows of same flower. For dark purple pansies use Banding Blue, Ruby and Black (this same combination of colors may be used in the dark centre markings of the white flowers). For centre of yellow pansy use Blood Red and Ruby. Be careful to preserve clear, clean lights in the first painting, for instance, the white marking and very heart of the pansy in both purple and white flowers. Apple Green greyed with Violet and Shading Green with Violet would produce greens of this cool tone, and in very dark green parts of background a touch of the purple mixture may be used with Shading Green. Blood Red and Ruby might have been used in the more red part of background in the first painting and Violet tones washed over it in the second and third paintings. Violet, Yellow and Violet and Yellow combined and deepened with Yellow Brown could be used in lighter tones of background.

Paint simply—use flat touches broad and clear. Leave sharp detail until last painting.



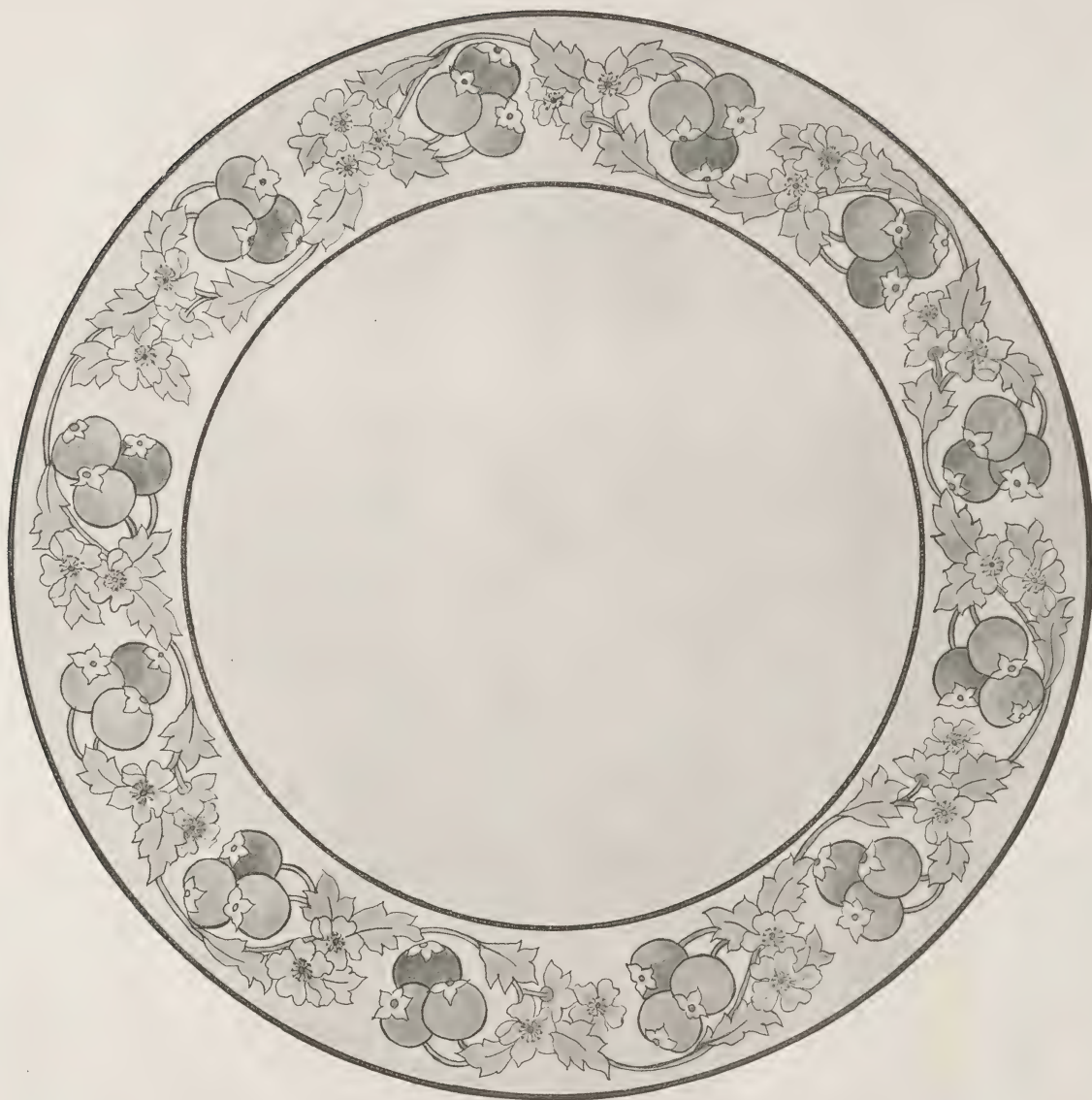
BAYBERRY DIPS

FIRST among the primitive peoples came the torch, for which purpose the pine knot was utilized; then the saving and hoarding of every bit of suet and fat from the wild animals killed for food of which to make the tallow candle; and then drawing from unused stores the berries of the plant Myrica, which yielded wax for finer candles. In the South it is called the Candleberry, more often the Myrtleberry, and again the Waxberry; but in New York and on Long Island it is called the Bayberry. It is rightfully Myrica; it belongs to the Bayberry family. The candles made from the berries of this bush were cherished by the pioneer housewives, and one wishes that this domestic industry still lived. When Kalm, the Scandinavian naturalist came to this country in the middle of the Eighteenth Century, he was delighted with these candles, and describes very fully the process of boiling the berries, and refining the wax. The pure flame, the fragrance and the faint green tinge all excited his interest. Beverly, the historian of Virginia, says: "These candles are never greasie to the touch, nor melt with lighting in the hottest weather. Neither does the snuff of these ever offend the smell like that of a tallow candle; but, instead of being disagreeable, if an accident puts a candle out, it yields a pleasant fragrancy to all that are in the room, insomuch that nice people often put them out on purpose to have the incense of the expiring snuff."

The industry of making these Bayberry Dips has been revived by the Hingham Society of Arts and Crafts. These dips are suitable not only for household use but are especially appropriate for Colonial teas, Thanksgiving celebrations and occasions which seek to recall the early history of New England.



TILES—ROOKWOOD MOULTON



PLATE—MABEL C. DIBBLE

DIVIDE an eight inch plate into twelve sections: The berries are in blue enamel—Dark Blue (Lacroix), Deep Purple (Lacroix) and Brunswick Black (Dresden) with one eighth Aufsetzweis. Use only turpentine in mixing. Shade berries a little, making the blue heavier on under ones. Leaves in greyish green, apple green, yellow for mixing, Brown Green No. 6 (all Lacroix), with a little Brunswick Black, one fourth Aufsetzweis; stems also in this color. Leaves can be in two tones of this enamel. The flowers are in white enamel, two

thirds Aufsetzweis, one third Hancock's Hard White enamel, with a little touch of Yellow for mixing and Brunswick for shading; centre dot Green, also centre dots on end of berries are green. The little blossom end on berries should be a brownish green, or yellow ochre added to a little of the green used in the leaves. Outer and inner band Dark Blue enamel. Outline all in black, Ivory Black two thirds, Dark Blue one third. Two firings are necessary. Outline first, fire, then fill in the enamels and fire again.



BLUE EYED GRASS—K. E. CHERRY

FIRST Fire—The flowers are banding blue and violet, with dark touches of same color in center; buds are a dark purple. The leaves are washed in with moss green, brown green and shading green. Second Fire—The flowers washed

with deep blue green and violet and a little blood and violet for sharp accents. The leaves are strengthened with shading green and black. Background use sea green, violet; yellow touches around flowers and Copenhagen blue.



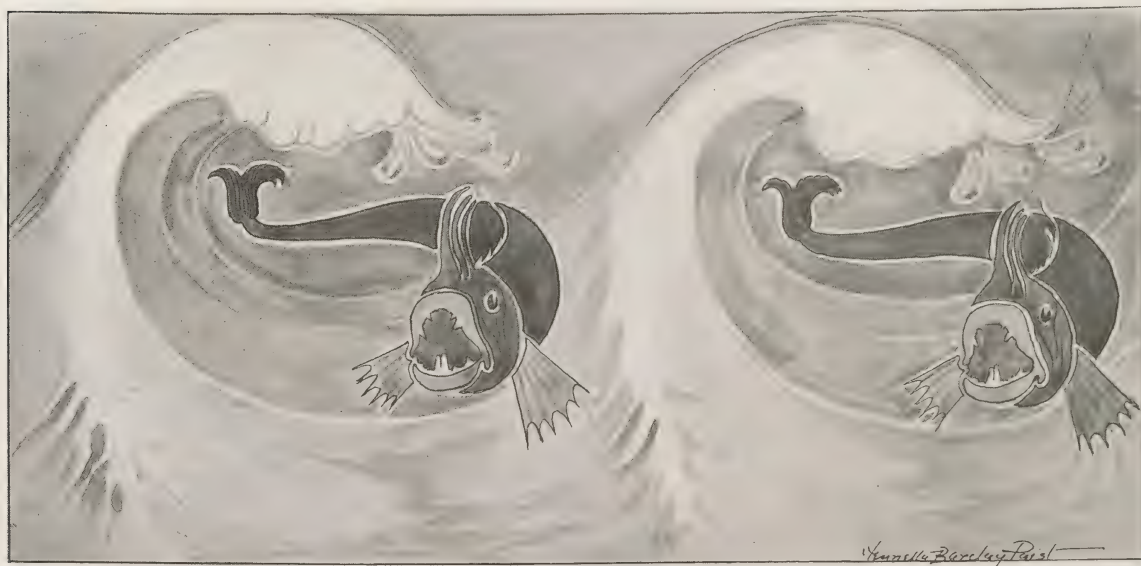
CHERRY BORDER FOR INSIDE OF FRUIT BOWL—LUCIA SOULE

THIS design of cherries is to be used for a fruit bowl. If a lustre treatment is desired, tint the bowl yellow brown and fire, then for second fire, cherries and leaves should be ruby and ground tinted again with yellow brown, then for third fire go over leaves with dark green lustre and make the outlines in black or gold, or make the ground silver, the cherries and leaves gold. For second fire put ruby lustre over cherries, dark green lustre over leaves and make black outlines, or ground may be black, cherries orange and leaves brown with gold outlines.

WATER COLOR TREATMENT FOR WOOD

CHERRIES to be done with Chinese Vermillion and a little Gamboge, leaves, Gamboge, Prussian Blue and a little Red for darkening. Stems Dark Green with Brownish shadings the wide stem brownish Green. To be outlined in darker shades or if burned all the outlines to be burned with a fine point before burning the background.

Top of bowl a narrow band of green and one wide band on outside of the dark green.



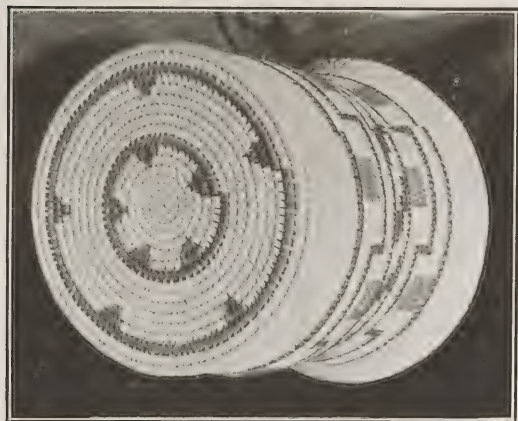
FISH DESIGN—HENRIETTA BARCLAY PAIST

This design may be adapted to a fish set, washing in the water in blue where darker and green in lighter tones; fish in darker tones of blue and green with a touch of dull red on eyes, mouth and gills.

THE CRAFTS

WOOD CARVING AND PYROGRAPHY. LEATHER AND METAL. BASKETRY, ETC.

Under the management of Miss Emily Peacock, summer address, 4477 Western Ave., Westmount, Montreal, Can. All inquiries in regard to the various Crafts are to be sent to the above address, but will be answered in the magazine under this head.



A RAFFIA WASTE PAPER BASKET

Madge E. Weinland

MATERIALS.

TWO pounds of washed natural raffia, one bunch of Indian red raffia, two bunches of black raffia, and a No. 2 darning needle.

Select fifteen broad leaves of the washed natural raffia and double them by folding. These are to form the filling of the roll. For the weaver use a leaf of medium width of the same material, and thread the needle with this at the thickest end.

To make the bottom of the basket, hold three inches of the finer end of the weaver, along the folded raffia of the filling, and begin to weave from the folded-end, by winding over toward you three time around, avoiding over-lapping. After the third time around insert the needle into the roll and draw tightly to hold the weaver more firmly. Repeat this stitch three times, and when finished, fold the roll so the beginning and end of the weaving meet. Insert the needle into the beginning and draw the ends together; wind over toward you three more times around the roll, and pass the needle through the hole in the center of the coil. Repeat this until the roll has been carried once around the coil; then continue weaving in the same manner, but hereafter pass the needle each time through the center of the coil previously made. This stitch is to be used throughout the basket.

When the roll has been carried around five complete coils, drop the weaver into the filling (leaving the needle threaded) and work with a new black weaver. Weave one stitch (three winding) of black and insert the needle into the center of the previous coil. Make five such stitches of black exactly one-fifth of the circle apart, separated by white weaving. The next time around make three stitches of black five times, the center stitch of each three to be over the black stitch in the previous coil; next time around use a black weaver throughout. Great care must be taken to keep the roll of uniform size, which can be done by adding a doubled strand whenever necessary.

The coil of black being made, continue by making four complete coils of natural raffia and in the next two coils, above each black joint previously made, weave a similar point.

Make the next coil again solid black, and then weave two coils of natural raffia. The diameter of the bottom should now be ten and a half inches. (See illustration Fig. 1). About three inches from the end of the last mentioned coil, gradually carry the roll upward so that when the end is reached the roll will lie directly over the previous coil. This ends the bottom and begins the side of the basket.

SIDE OF THE BASKET.

Make eight coils of the natural raffia, laying one above the other, using care to keep the side straight and of uniform diameter. The circumference of the side of the basket should be measured at every fifth coil, at least. When these eight coils have been completed, make one coil of black. Into each of the next four coils, weave one and a half inch of Indian red raffia at four points, spaced equally distant, that is, one-fourth of a circle apart, making four squares of Indian red. When weaving the third of these coils, midway between each square, weave a black line three and a half inches long. In the next two coils above the black line weave one stitch of black at each end of each line and in the second coil, over the center of each line, weave one and a half inches of Indian red. In the third coil, above the black line, join the black stitches with a line of



black over the red squares (see illustration Fig. 2), and make red stitches above those of that color in the previous coil. The next two coils are of natural raffia, with Indian red to complete four more squares. Weave another coil of solid black.

In the next three coils, the natural and black raffia are used in short alternate strips, off-setted. The next coil is again woven entirely of black raffia. Continue the design with four red squares, black Grecian border, four red squares, and another coil of black, exactly as was woven below. Finish the basket with six coils of natural raffia, flaring them to make a bell shape top. To end the roll, gradually remove the filling, a leaf at a time and allow it to run out in a distance of about six

inches. The final stitches should be close together and the end of the roll well covered.

When the basket is completed there should be nine coils of natural raffia, in the side, 23 coils including the design, and six coils of natural raffia above the design. If the coils are uniform, the side should be twelve inches in height.

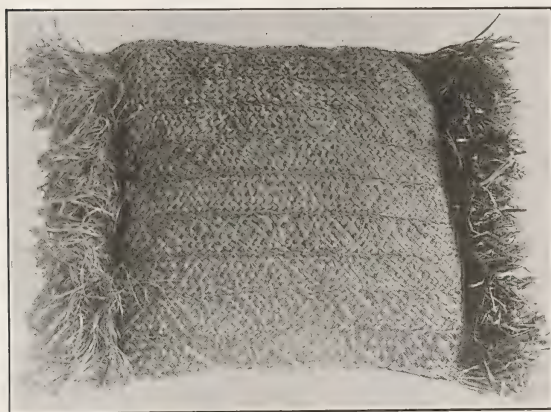


A RAFFIA PILLOW

Madge E. Weinland

MATERIAL REQUIRED.

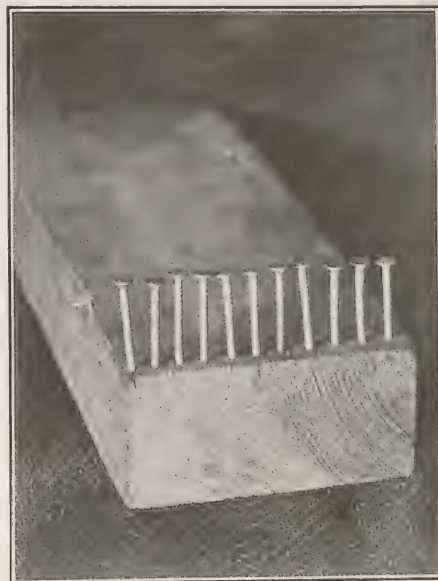
THE material necessary for a green and blue Raffia pillow 22 inches square, is four bunches of dark blue raffia and three bunches of Irish green raffia, for the upper cover, and about one pound of natural raffia for the lower cover. If the pillow is to be filled with raffia, about four pounds more of the natural raffia will be required. Procure, also, a block of soft wood, three inches thick, five or six inches wide, and at least eight inches in length; also eleven six-penny nails. Into this block of wood, and as near the end as possible, drive these eleven nails in a straight row, about three-eighths of an inch apart, center to center of the nails. This block must be heavy, so that it will remain in place while working the raffia.



TO MAKE THE PILLOW.

It is better to make the under cover first as it is of less importance, and easier to work. Around each nail tie a three leaf strand of natural raffia of uniform size, leaving the upper end long enough to make a three inch fringe; then make a broad, flat braid. Beginning at the center, or the sixth strand, cross the sixth strand over the fifth strand and under the fourth, over the third, under the second and over the first; hold this strand in place and take the fifth strand, which is now under the sixth, and cross it over the seventh and under the eighth, over the ninth, under the tenth and over the eleventh. Hold this in place and begin to interlace the seventh strand (which is under the fifth) over the fourth, under the third, over the second and under the first. Interlace the fourth strand, which is under the seventh, just as the fifth strand was worked, over and under. Continue in this way until the first and eleventh strands are reached. Having braided this far, begin to work with the fifth and sixth strands again, which are braided back toward the center in the manner as was done in the beginning. Interlace the strands until the braid is 21 inches long. In working, do not pull the strands strongly, as this will result in a narrow

braid. The braid should be kept of uniform width and as broad as possible. If any leaf of a strand runs out before reaching the end of the braid, lay in the larger end of a new leaf along the end of the leaf that has run out, and continue to braid, holding the new leaf in place until it is worked into the



braid sufficiently to prevent pulling out. About one inch of the end must project out on the under side of the braid. When the braid is 22 inches long, along its edge, untie the knots around the nails, remove the braid and start another.



For the back of the pillow there should be nine braids, if they have been made of proper width. When that number are finished, sew them together with single strands of natural

raffia, avoiding over-lapping. This completes the back, or lower cover.

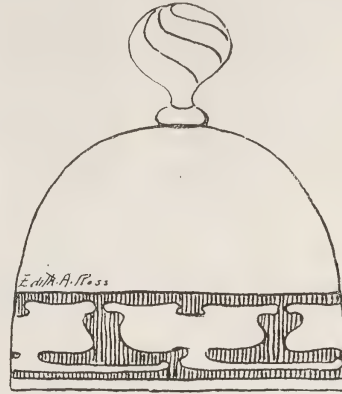
The top, or upper cover, of the pillow is made of dark blue and Irish green raffia. To the first nail tie a three leaf strand of the dark blue raffia, and to the second nail tie a three leaf strand of Irish green raffia. Continue alternating blue and green strands until all the nails are filled. The first and last nails will now have dark blue raffia knotted around them. Braid these strands, beginning with the sixth strands as has been already described. Sew them together with either blue or green raffia, to form the upper cover. When all ten braids have been united, sew the upper and lower covers together along one edge only, with an over-casting stitch, using either blue or green raffia.

Make a muslin pillow case of the same size as the raffia cover, leaving an opening at one corner through which it is filled. Four pounds of washed natural raffia should be cut into three lengths. Scraps could be used as far as possible. Fill the case with this material, using care to fill out all the corners, and when full, sew up the opening. Fit the cover over the pillow and sew the remaining edge and the two ends with colored raffia. If the pillow is of the proper size it should fit snugly inside the cover. For the ends do not use the over-cast stitch, but sew through and through just sufficiently to prevent the braids from unraveling. Clip the ends evenly to make a fringe three inches long, and the fringe of the two covers should be so mixed that all three colors of raffia will show on the upper side.

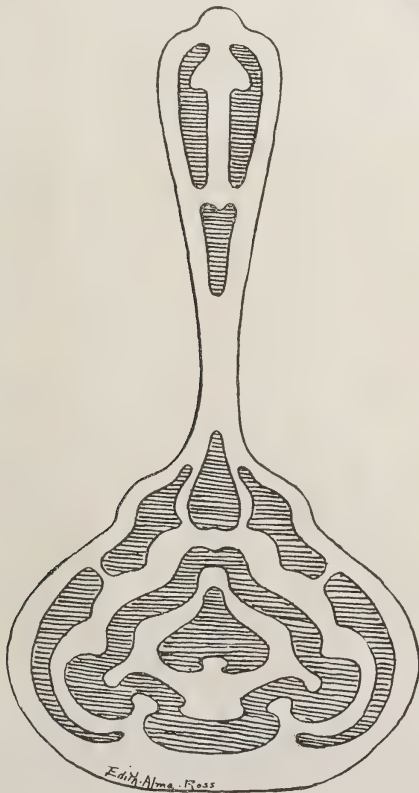
This pillow will be found extremely durable and well adapted for use on the summer porch.

SILVER BELL AND SPOONS

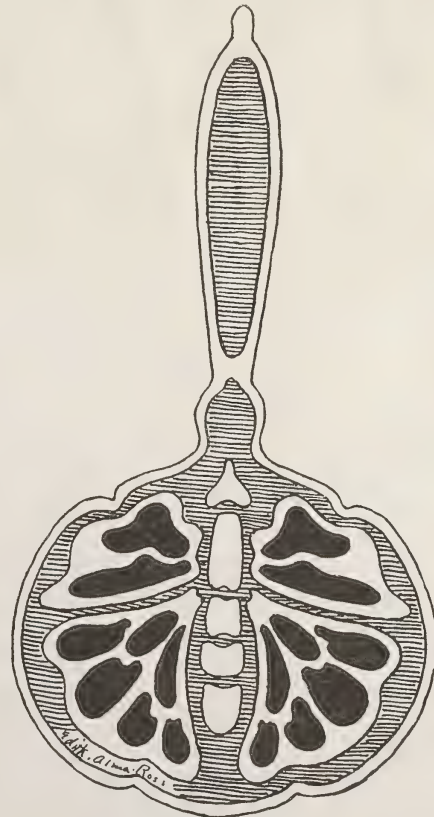
THE design for a bell could be carried out in silver but the metal must be annealed the last thing so that it will have a musical sound. Also a ring of silver wire must be soldered inside the edge of the bottom of the bell, this helps to keep the sound in. A long graceful handle made of silver wire could be used instead of the knob, and the background of the border design etched in with nitric acid.



The spoons designed by Miss E. A. Ross should be cut out of sheet silver about gauge 12, the bowls being shaped on a wood pattern block and the spoons finished in the usual way. The designs could be enamelled or slightly etched in, with nitric acid.



Silver bonbon spoon etched or enameled.



Silver bonbon spoon etched or enameled.



The Art Barn where the exhibitions are held.

The Deerfield (Mass.) Arts and Crafts Society held its Annual exhibition from the 19th to the 22d of July. The basketry and blue and white needlework was unusually attractive. There was also an interesting exhibit of metal work by Mrs. Madeline Yale Wynne of Chicago, who always spends two months of the summer at Deerfield. The beautiful little town was packed with pilgrims to the exhibition.



Village Room.

Emily J. Peacock
Worker in Metals. Enamelling.
Guild of Arts and Crafts.
Summer address, 4477 Western Ave.,
Westmount, Montreal, Canada.

"ROCHESTER" HAT PIN

(improved)
post-
paid **25 cts.**

China
Medallion and
Mineral Transfer
FREE

The "ROCHESTER" A Perfect Fountain PEN, \$1.00

Guaranteed Actual Value, \$2.00.

Out of 80 million people in the United States only 37,000 are china decorators. *It is your opportunity* to engage in a most fascinating and profitable occupation.

OUR CHINA BOOK

just published, contains over a thousand up-to-date European novelties of interest to china decorators. *Mailed free* (postage 5c).

GEO. W. DAVIS & CO., 2356 State St., ROCHESTER, N. Y.
Originators of "Rochester" Novelties.

ANSWERS TO CORRESPONDENTS.

This column is only for subscribers whose names appear upon our list. Please do not send stamped envelopes for reply. The editors can answer questions only in this column.

All questions to be answered in the Magazine must be received before the 10th day of the month preceding issue.

A. W.—You will find treatments for the last two supplements in this number of KERAMIC STUDIO. If your roses are too pink they cannot be changed except to make them red, by firing very hard they will be paled some what but the color will be bluish. To dust color on a background which is just from the kiln you proceed as is always done for a dusted tint. If you wish a very deep color you pad carefully with English grounding oil until tacky, wipe out the portions you do not wish grounded, then dust on the powder color until the oil has taken up all the color it can and the surface looks dry. If you do not wish the color very deep, you thin the grounding oil with spirits of turpentine to the desired consistency before padding. Then treat just as if you were dusting on a painted surface.

Glazing a painting is retouching with thin washes of color over a fired surface.

J. R.—The terms glazing, dusting, flushing are frequently used to signify retouching a painted surface, either with washes of color or rubbing into the freshly painted surface more or less powder color. This process may be repeated as often as you wish and with whatever colors you make think will give the desired effect.

We would imagine that either a brown or olive green would go best with your purple Poppies. Perhaps the dark brown would be preferable.

If your light green lustre fired yellow, it was perhaps too thin or put on too thinly.

Mrs. A. G. A.—There is no absolute rule as to the time of firing a kiln, usually one hour and a half is sufficient for a good sized kiln but the longer the time in firing and cooling off, the better the results. You will have to judge by the color inside the kiln, it should be a luminous orange. A few trials will be necessary before you can decide the necessary time. Each individual will have to work out this problem for herself as the working of the kiln depends on draft and other local conditions.

W. E. W.—The Platinum for china decoration comes either in powder or ready prepared. If in powder mix with equal parts oil of tar and oil of turpentine, just enough to make a smooth paste, thin with spirits of turpentine; it should be well rubbed down with a glass muller on a ground glass palette; if ready prepared, mix only with spirits of turpentine. Burnish silver can be used over either liquid silver or liquid gold or over any gold or bronze preparation.

A N ILLUSTRATED eight-page addition to our Catalogue, showing color studies to-date is now ready.

SENT FREE ON APPLICATION.

KERAMIC STUDIO PUB. CO., Syracuse, N. Y.

1500 WHITE CHINA BUTTONS and MEDALLIONS at 4c or 40c a dozen or \$4.50 in gross lots. Delivered at your door. Gold plate backs for Medallions 10c. Money with order.

HUDSON CROCKERY COMPANY,

348 SO. SALINA ST., SYRACUSE, N. Y.

If you want a Gold that you can always depend on, use

"MARSCHING'S"

we sell more of it than any other brand.

H. A. Carroll & Co., 332 Main St., Memphis, Tenn.

"ROCHESTER" HAT PIN

(improved)
post-
paid **25 cts.**

China
Medallion and
Mineral Transfer
FREE

The "ROCHESTER" A Perfect Fountain PEN, \$1.00

Guaranteed Actual Value, \$2.00.

Out of 80 million people in the United States only 37,000 are china decorators. *It is your opportunity* to engage in a most fascinating and profitable occupation.

OUR CHINA BOOK

just published, contains over a thousand up-to-date European novelties of interest to china decorators. *Mailed free* (postage 5c).

GEO. W. DAVIS & CO., 2356 State St., ROCHESTER, N. Y.
Originators of "Rochester" Novelties.

The "ROCHESTER" CHINA KILN

Does perfect work—good to look at—as convenient as a roll-top desk—yours for..... **\$35**

We Send The "ROCHESTER" Pyro-Burning complete OUTFIT..... **\$1.75**
and include FREE this beautiful.....
.....Jewel box

Pyro Catalogue
FREE



KEEP THE FIRE ALIVE

KERAMIC STUDIO

CONTRIBUTORS

MISS BEATRICE BROOKS ♀ ♀ ♀ ♀
MR. CHARLES F. BINNS ♀ ♀ ♀ ♀
MRS. K. E. CHERRY ♀ ♀ ♀ ♀
MISS EMMA A. ERVIN ♀ ♀ ♀ ♀
MR. W. P. JERVIS ♀ ♀ ♀ ♀
MISS MAZIE E. MURPHY ♀ ♀ ♀ ♀
MISS MARGARET OVERBECK ♀ ♀
MRS. HENRIETTA BARCLAY PAIST ♀
MR. HENRY L. PARKHURST ♀ ♀
MISS EMILY F. PEACOCK ♀ ♀ ♀
MR. F. H. RHEAD ♀ ♀ ♀ ♀
MRS. SARA WOOD SAFFORD ♀ ♀
MISS OLIVE SHERMAN ♀ ♀ ♀
MISS CATHERINE SINCLAIR ♀ ♀
MRS. ALICE WITTE SLOAN ♀ ♀ ♀
MISS BLANCHE VAN C. SCHNEIDER ♀
MRS. BELLE BARNETT VESEY ♀ ♀
MR. CLIFTON WINDSOR WHITE ♀ ♀

NOV. MCMIV

Price 35c.

Yearly Subscription \$3.50

A MONTHLY MAGAZINE FOR THE POTTER AND DECORATOR

CONTENTS FOR NOVEMBER 1904

	PAGE
Editorial,	143
League Notes,	143
Brush Work, (Lesson 4),	143-144
Mocassin Flower,	145
Grape Designs, (with Colored Supplement),	146-147
Water Ranunculus,	147
Matt Glazes at Low Temperature,	148-150
Plate,	149
Indian Grass,	150-151
The Cicada,	152-153
Boneset,	154
Design for Bowl,	154
Harebell,	155
Bouncing Bet,	156
Bonbonniere Design,	156
Peacock Panel,	157
Bunch Berry Design for Plate,	158
Tankard,	159
The Crafts—Making a Stained Glass Window,	160-162
Blue and White Plates,	163
Answers to Inquiries,	163
Answers to Correspondents,	163
Stencils,	164
Belle Barnett Vesey,	143
W. P. Jervis and F. H. Rhead,	143-144
Henrietta Barclay Paist,	145
Sara Wood Safford,	146-147
Beatrice Brooks,	147
Charles F. Binns,	148-150
Catherine Sinclair,	149
Kathryn E. Cherry,	150-151
Margaret Overbeck,	154
Mazie E. Murphy,	154
Emma A. Ervin,	155
Margaret Overbeck,	156
Alice Witte Sloan,	156
Olive Sherman,	157
Blanche Van Court Schneider,	159
Henry L. Parkhurst,	160-162
Emily F. Peacock,	163
Clifton Windsor White,	164

Some Leading Agencies of Ceramic Studio

We take pleasure in mentioning a few of the leading agencies for the sale of the KERAMIC STUDIO, where, also, subscriptions may be placed:

Boston, Mass.—Miss E. E. Page, 286 Boylston St.; Smith & McCance, Old Corner Book Store.
 Brooklyn—A. D. Mathews & Sons, Fulton Street.
 Buffalo—Mrs. Filkins, 609 Main Street.
 Chicago—A. C. McClurg & Co., Brentano's; Burley & Co.;
 Cincinnati—Miss M. Owen, 245 Elm Street; A. B. Closson, 4th Street near Race; Traxel & Mass, 4th Street, near Elm.
 Cleveland, Ohio—Vinson & Kerner, 150 Euclid Ave.
 Columbus, Ohio—Lee Roessler, 116 So. High Street.
 Dayton, Ohio—W. W. Kile & Co.
 Denver, Colo.—E. Meininger, 807 16th Street.
 Detroit, Mich.—L. B. King & Co.
 Hartford, Ct.—E. M. Sill.
 Grand Rapids, Mich.—Miller, Wolfe Co.
 Indianapolis, Ind.—Keramic Supply Co., Lemecke Building.
 Kansas City, Mo.—Emery, Bird, Thayer Co., Geo. B. Peck Co.
 Louisville—Louisville Book Store.
 Minneapolis, Minn.—Minn. Art China Co., 607 1st Ave. So.

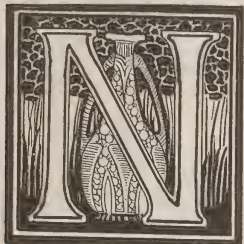
New York City—Brentano's, Union Square; M. T. Wynne's, 11 E. 20th St.; The Fry Art Co., 36 W. 24th St.; Wanamaker's; American News Co.
 J. B. Ketcham, 107 W. 25th Street; M. J. Whaley, 430 5th Ave.
 Newark, N. J.—Keramic Novelty Co.
 Oakland, Cal.—Smith Bros.
 Omaha, Neb.—Megeath Stationery Co.
 Philadelphia—Wanamaker's.
 Pittsburgh, Pa.—Otto Schaffer & Bros.; Kurtz, Langbein & Schwartz;
 R. S. Davis & Co., 346 Fifth Ave.; John G. Yergan, 36 Fifth Street.
 Reading, Pa.—Rowland's Book Store.
 Saratoga Springs—Robson & Adce.
 San Francisco—Mrs. M. E. Perley, 207 Post Street.
 Sioux City, Ia.—J. K. Prugh, 312 Nebraska Street.
 St. Louis—F. Weber & Co.; A. S. Aloe & Co.
 Syracuse—Wolcott Book Shop; Welch & Hollingsworth; W. Y. Foote;
 A. L. Varney & Co., 338 S. Salina Street.
 Tacoma, Wash.—Art Exchange, Mrs. Mead.
 Toronto—The Art Metropole.
 Warren, Pa.—Alzora Bashline.
 Washington, D. C.—Woodward & Lothrop.
 The Magazine may also be ordered from any news dealer or book store in this country, who can procure it through the American News Company New York, or its branches.

KERAMIC STUDIO

Vol. VI, No. 7

SYRACUSE, NEW YORK

November 1904



NOW that the Autumn Competition is closed, we have decided to have monthly competitions instead of the semi-yearly ones. We think in this way we will obtain better results as the designer will have but one subject to consider and a second advantage will be the immediate publishing of the prize designs. The first monthly competition will close the fifteenth of January and be published in the March number. This delay is on account of the interruption of holiday work. The subject of the first competition will be found elsewhere in the Magazine under the head of "The Cicada."

*

The awards for the Autumn Competition will be found in the Christmas number of *KERAMIC STUDIO* which we think will be unusually attractive. The supplement will be a prize design in color, and the Magazine will be filled with Christmas suggestions.

+

The subject of Ceramics at the St. Louis Exposition will be exhaustively treated in *KERAMIC STUDIO*. If however, we attempted to cover the entire field the writer and the public would be exhausted long before the material, since every building on the ground held more or less of porcelain or pottery and the miles covered in walking from one exhibit to another were not more in extent than the pages it would take to tell it all. We doubt if an exhibition could be more badly arranged in respect to these special subjects than the St. Louis Exposition. The paintings and sculpture are mainly in one building, and a few other subjects are well grouped, but the porcelain and pottery exhibits were scattered all over the wide extent of the exposition ground—from Dan to Beersheba was a mere step, comparatively. The Sèvres exhibit in the French building, Copenhagen in the "Varied Industries", Rorstrand in the "Manufactures," little individual exhibits in the Art Palace, some in State buildings, some in the Educational building and still others in still more remote spots. So if by chance, some exhibit has been overlooked, it will not be an unforgivable offense.

We are waiting for some promised illustrations before beginning the articles but do not expect to wait long.

* *

LEAGUE NOTES

THE last regular Advisory Board meeting, held Friday, September 16th, at the Art Institute, was a typical Fall rally. The earnestness in which all the plans for the Winter and Spring were discussed, proved a singleness of purpose and the promise of eventual success. If all members would give the plan of education at least one thorough trial, they would satisfy themselves, and be just to this committee.

We have as members of our League, naturalistic painters of note, whose work is a credit to any exhibition. But we must remember that these artists have had years of preliminary

training in foreign countries before opening studios here. We, too, must have those years of training before we can hope for any degree of success.

The Trenton manufacturers have assured us that the bowl and vase will be procurable in plenty of time. As soon as word reaches us regarding them, we will advise league members. The motion was carried, however, to substitute shapes already on the market, in case of unnecessary delay.

Our local club has drifted along in a prosperous manner, acceptable to an uneducated public. We now, however, have been shaken out of our lethargy, and for the first time, have adopted the League study course. Our plan is, for each to work out the outline drawing for cup and saucer, Problem I, and submit it for criticism at our next meeting, Saturday, November 5th, at which time we will listen to a practical talk on design by a professional designer. In like manner, at the following meeting, the jar, Problem II, with criticisms and lecture by a professional potter. This plan will be continued until the end of the course.

We cordially invite all individual members, who have no available critics and are not willing to incur the expense of transportation, to send their work to be judged with ours. We will return it with the best criticism obtainable.

The Triennial report will reach you soon. We are still unable to get the correct names and officers of some clubs. The old lists have been printed and when the new elections are held, we will make corrections.

Mr. Albert Keith, treasurer of the N. L. M. P. is at present in Europe. He hopes to be at his studio again the last of November.

BELLE BARNETT VESEY,
President, N. L. M. P.

* *

BRUSH WORK

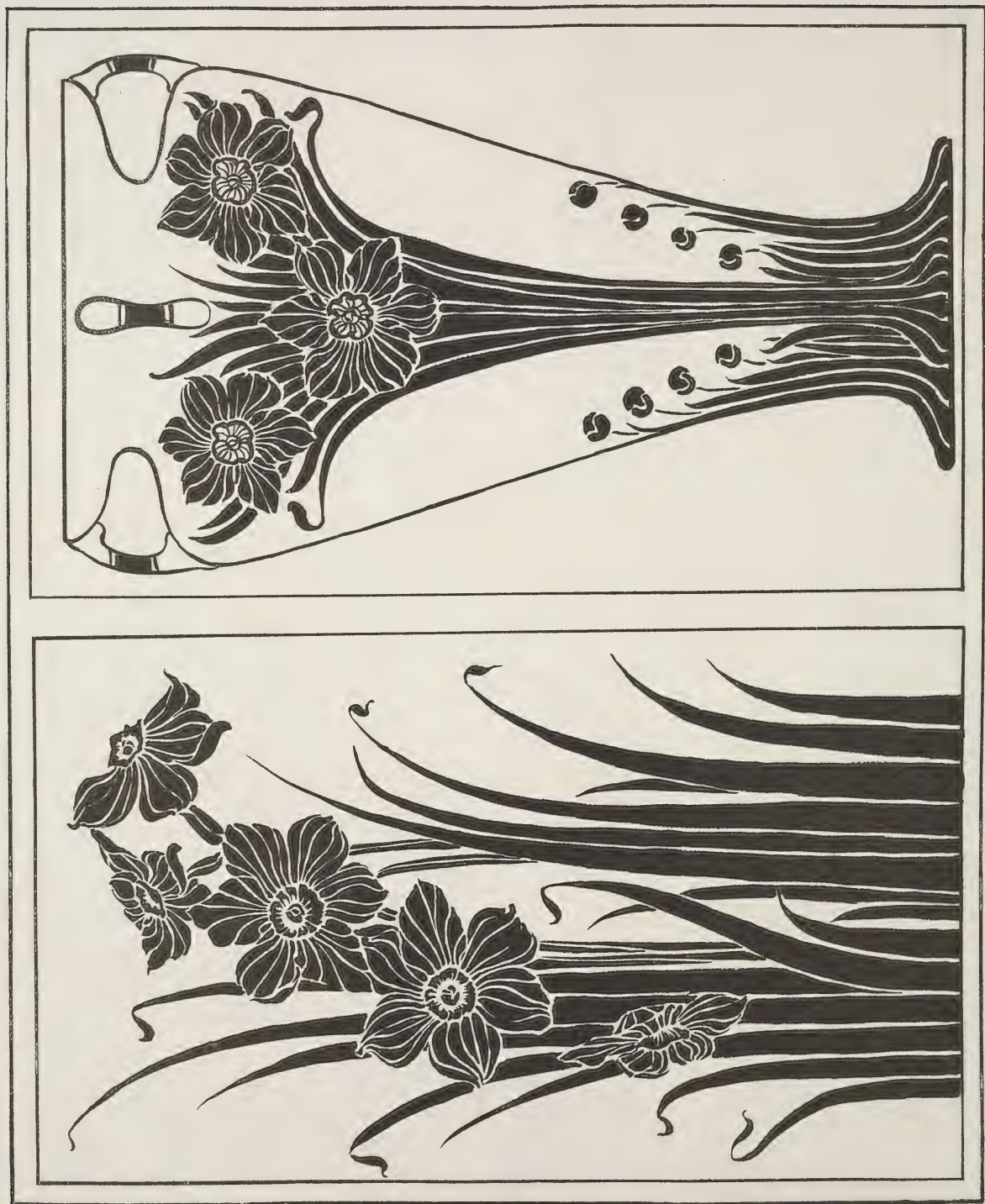
W. P. Jervis and F. H. Rhead

LESSON 4.

THIS lesson gives an example of a drawing from nature and the same flower conventionalized as a decoration for pottery.

Now that the student has had some little practice on simple strokes and forms, it is time to somewhat elaborate them. It should be a fixed rule with the students to make their own natural studies, for it not only teaches them more, but they do much more original work. However good a study may be it is useful only to teach and suggest, not to slavishly copy. It is altogether too prevalent a practice this watching out for studies by fashionable painters, and cannot be too strongly condemned. We repeat, make your own natural studies and put in them the best work you possibly can.

The first study is intended to be painted on tinted paper, if a dark dull brown or amber is obtainable. If not, use a good brown wrapping paper with a dull surface. This latter is necessary as the colors will be required to be opaque, preferably by the addition of a little Chinese white. Start first with the flowers, indicating their position only and omitting the detail. For these use gamboge with a touch of Indian yellow and



enough white to make the color opaque. For the leaves use olive green formed of Indian yellow and Prussian blue. White is only required in the green if the color of the paper is a very dense brown.

In drawing the leaves, choose the leaf pointing to the left hand corner, then the one pointing to the right, and these will act as guides for the rest. By the time the leaves are finished the centers of the flowers will be dry and the seeds may be touched with emerald green and the edge of the bell in vermilion. You can now line the edge of the study with a black border about one quarter inch thick. This will be found a quick and useful method for making studies for conventional forms and will bring out the originality of the student.

The vase is intended to be worked out in underglaze colors. The background is a pale yellow green, put on with a soft sponge. Flowers in white with yellow centers and crimson line around the edge of the belt. The leaves are olive green. Small flowers at base in crimson. Handles should be

in red brown with chocolate brown bands. Sponge the inside of vase with a darker green.

THE TEST

The basket weaver breathed a song,
And her heart was light as the day drew long;
As her work took shape 'neath fingers deft,
With its colors blended in warp and weft.
The potter sang, as with whirling sound,
The wheel he turned; and round by round
The senseless lump took shape and grew,
Transformed into beauty rare and new.
The woven fabric would you choose?
Or the child of the potter's brain and thews?
The one with its colors, smiling, gay,
Or the soul that rose from the lump of clay.
The fiery ordeal here on earth,
Is the proof of fleeting or lasting worth;
And the fabric must yield to the clay its due,
As it comes from the furnace tried and true.

D. R. L.



MOCCASIN FLOWER—HENRIETTA BARCLAY PAIST

LAY in the leaves with a crisp green. The body or lip of the flower a clear bright yellow (Albert Yellow), the inside a soft green (White Rose). The petals are reddish (Sepia)

and the stamen spotted with the same. A pleasing background of lavender or grey (Copenhagen) helps to form a harmonious color scheme. Outline strongly.



GRAPE DESIGN—SARA WOOD-SAFFORD

GRAPE DESIGNS (Supplement)

Sara Wood Safford

THE same colors are used throughout the entire set of panels, the same purples, the same reds, the same greens, yellows and browns. The worker will observe in which drawing purple dominates, in which green, the violet-green and so on.

For the purple grapes make a deep purple with a dark blue two thirds, Ruby one third and a bit of black. Model clearly in the first painting, having strong light which may be lowered with a thin wash of blue in the second painting.

In the red grapes use Blood Red and Ruby mixed in the brush together—these also model clearly, and over some of the lights wash blue in the second painting. Yellow Brown and Yellow Red with Yellow Red and Blood Red are used in the warm and more brilliant clusters. Grey shadows for yellow grapes may be made of Violet and Yellow; deep shadows of Brown Green and Yellow Brown.

Yellow and Yellow Brown are used in warm background effects. Apple Green, Yellow Green, Brown Green, Shading Green and Dark Green may be used in the leaves and backgrounds, the light greens may be greyed with violet, then darker greens with the purple made for the purple grapes. The yellow with violet will lower tone of background where needed. Violet with red (Carnation) will produce red violet effects. Brown green with red (Blood Red) will produce warm brown tones.

Paint in as simply and frankly as possible, being careful to get greys without getting muddy color. In the second painting lay the flat washes over grapes and background. In the third painting add what detail is necessary.

These color suggestions apply to larger drawings in black and white.

INDIAN POTTERY

A history of pottery in the United States would hardly be complete without mention of the pottery of the American Indian, inasmuch as the Indians are the only true Americans. The wandering tribes found by the first white settlers were merely savages, possessing only the rudest implements made of stone and a few vessels molded by hand from coarse clay, partially baked and of a crumbling nature. Of course, very few of these vessels are in existence at the present day, but there are two specimens in the historical collection in Pennsylvania. These were found in a cave in Pennsylvania about the middle of the present century. One is covered with small dents, probably made with a flint, and the other has quite an elaborate border of incised lines and notches. Clay pipes are found among the relics of Eastern tribes, often with a bowl shaped like the head of a bird or animal. Allusions are often made by early historians to the custom of smoking among the North American Indians. It is said that they smoked dry herbs which also satisfied hunger, and that they often went four or five days without food while smoking these herbs. Many of the pipes were made with separate bowls and stems, the stem to be inserted into the bowl when in use. In addition to clay vessels, the tribes inhabiting the region about the Great Lakes often used utensils made of birch bark. Sometimes they cooked their food in them by putting hot stones into the vessels with the food. The DeSoto explorers described the boiling of water by the Indians by means of dropping hot stones into jars of water.

Among the remains of the mound-builders are jars, basins, urns, etc., often molded in vegetable, animal, or human form, and ornamented in geometrical designs. Pipes were found among the relics of the mound-builders, many of them made of



WATER RANUNCULUS—BEATRICE BROOKS

stone, carved, showing a prodigious amount of labor. The mound-builders were evidently much more civilized and skilful than the eastern tribes.

The pottery of the Indians of the Far West may be divided into three styles:

1. The coil work made by coiling the soft clay like a rope around the vessel of wicker or a gourd. The surface was often indented with thumb marks, or covered with some fabric which would leave an imprint on the soft clay.
2. A ware painted red.
3. A whitish ware coated with clay and painted in designs of various colors.

Vessels of the first class were usually large urns designed to hold meal or the ashes of the dead. It is evident that the early Indians cremated their dead, because of the ashes found in these urns and also because human remains have not been found as might have been expected if the dead had been buried.

The second class, the vessels painted red, were of a more durable quality and were often burnished with smooth pebbles and painted with a design in black.

The third variety is far more common and is made of fine clay mixed with pounded shells or stones, and is superior to any ware produced by the native Indians. It is usually covered with a wash, polished and decorated, the figures being usually black, red, and yellow. The Pueblo Indians excelled in this pottery. They made mugs, pitchers, jars, urns, dippers, bottles, bowls, etc. Their mugs often had double handles. The interior of the bowls of the dippers were, in many instances, painted in elaborate designs. There were some combinations of the different styles, as a bowl of coil design might have an interior polished surface painted in geometrical pattern.

The Indian pottery may be divided into three classes, the useful, the æsthetic, and the grotesque; the useful, consisting of articles made for utility alone, with no attempt at decoration; the æsthetic often coming up to standards of beauty and art, as exemplified in the best work of the Pueblo Indians, but more especially in the product of the Indians of Central America (who were far more cultured than any other class of American Indians) and the grotesque, practiced to some extent by the Indians of all ages, but more by the Indians of the present day perhaps than at any other period. As the art of the white man is more or less impregnated with legend and mythology, so the ornamentation of the Indian vessels was often symbolical, and though of no meaning to our eyes, it was of deep significance to the Indian.

Thus we find at the discovery of America that the Indians varied greatly in civilization. While the Indians of the East were making only the rudest and most necessary articles, many of the Indian tribes of the West were producing pottery of an artistic and elaborate type. Art has been slowly but surely developing in the United States since Europeans first took up their habitation here, but the American Indian is practically where we found him five hundred years ago. The modern Indian continues to make pottery after the ancient methods, perhaps a little more elaborate in decoration, but with less regard to the protection of the ware.—*Boston Star*.



Andrew Carnegie is about to erect technical schools, among which will be a school of ceramics.



SHOP NOTE

The Ceramic Gold Co. of Brooklyn are putting up their gold in a porcelain slab with a depression to hold the gold. It seems a very good arrangement.

MATT GLAZES AT LOW TEMPERATURES

Charles F. Binns

IN a previous paper on matt glazes the temperature chosen was that at which the body itself could be fired. The minimum point for this purpose with ordinary potters' materials, cannot be below cone 1 and even this can only be accomplished with a very careful selection of clays. It often happens however, that natural clays are used in studios, clays which burn to a red color and such as are commonly used for brick making. There is no possible objection to the use of these clays, in fact there is every reason why such use should be encouraged. They are easily available, cheap and smooth to work. On the other hand there are not many such clays which will stand cone 1 heat. They will melt and collapse before this is reached. Consequently it becomes a matter of importance for those who are interested in the use of natural clays to be able to glaze their pottery at a fire which will not damage the ware itself.

The great majority of common brick-clays will burn to a nearly vitrified body at heats ranging from cone 06 to cone 04 (1886° to 1958° Fahr.) and the glazes given for cone 1 will not fuse at these temperatures.

Perhaps some will remark, upon reading the previous sentence, that as we are talking about matt glazes the question of fusion is not important, but this is an error. It was demonstrated by the writer of this paper, early in 1903, that matt glazes are not dull by reason of infusibility but by virtue of a special chemical composition. If it were a question of producing an unfused glaze nothing would be easier, and the lower the temperature the better, but the problem is to compose a glaze which shall, at one and the same time, flow at a low fire and carry enough of the deadening materials to produce a texture. The chemical composition of matt glazes is much the same at whatever heat they are to be burned. The difference between a glaze at cone 04 and one at cone 2 is not the amount of flux which it contains but the kind of flux. The matt quality is produced by the alumina which is contained in feldspar or kaolin. The amount of alumina can only vary within very narrow limits if a good texture is to be secured, but unless the right flux or base be used for each temperature, the glaze will fail to combine and flow at the low fire, or will degenerate into a leathery mass at the high.

Two glazes are here given which will produce good matt surfaces at the melting point of cone 04 or about the heat of an ordinary brick kiln:

No. 10—White lead	50	No. 11—White lead	34
Whiting	9	Whiting	14
Feldspar	27	Kaolin	8
Kaolin	14	Feldspar	37
—	—	Flint	7
100	—	—	—
			100

Each of these glazes will produce its own effect upon the coloring oxides so that they cannot be exchanged each for each. Two are given because all fires are not alike. Even if the same cone is used and the fire is just that which causes it to bend there is still a difference. Two important factors are to be taken into consideration in kiln firing, the first is time, the second, quality. If one burns one's own kilns the time is, usually, short. Burning a kiln specially for pottery consumes from six to eighteen hours but it is not every artist potter who owns a kiln. Sometimes one must depend upon a neighboring kiln where brick or tile are burned. These kilns take from eight to fourteen days to fire and the behaviour of the ware under such treatment must be radically different from what it



PLATE—MISS CATHERINE SINCLAIR

Design to be executed in grey blue.

would be in a studio kiln. The second point is the quality of the burn. Firing is a complex chemical process. The products of combustion passing through the firing chamber exert important influences upon the constituents of both body and glaze, and successful results depend upon the control of these influences.

For a quick burn glaze No. 10 is the more suitable, for a slow burn, glaze No. 11. In the use of matt glazes too much care cannot be taken to have a thick even coating of glaze. More trouble and dissatisfaction is caused by thin glaze than by anything else. In the mixing of the glaze it is not necessary to grind the materials. White lead and whiting are quite fine in their usual form. Clay or kaolin only needs to be freely mixed with water, and feldspar and flint can be bought ground from the dealers in potters' supplies or from wholesale chemists such as the Roessler & Hasslacher Company, 100 William Street, New York.

The mixture being weighed out the whole batch should be triturated in a mortar and passed through a sieve of 20 meshes to the inch. Water is added until a thin paste is secured free from lumps. The batch is now placed in a deep bowl and thoroughly mixed with a Dover egg beater or else is put into a "Christy improved mixer" (The Christy Knife Co., Fremont, Ohio) and worked until smooth. A mucilage must be supplied in order that the glaze may not crack while drying. The best mucilage is made from gum Tragacanth. A small handful of the gum, not powdered (about 1 oz.) is put into two quarts of cold water and steeped for 24 hours. At the end of that time the mass must be well worked with the egg beater or in the Christy mixer until free from lumps. More water is added if too thick but it is best to have a good thick gum. A few drops of carbolic acid or some other convenient germicide will prevent any offensive odor from developing. Taking the glaze from the mixer it should be set in a deep narrow jar, such as a Mason fruit jar, and allowed to stand and settle. All the clear water is then poured off and a tablespoonful of mucilage added to every 100 grammes of dry glaze in the mixture. Glaze so prepared can be kept indefinitely in an air-tight jar and will always be ready for use.

To glaze the pottery the whole batch of glaze should be emptied into a bowl and well stirred. The pottery is thoroughly saturated with clean water to prevent absorption and consequent irregularity and must be wiped dry from all surface moisture. The glaze, which should be as thick as a rich mayonnaise, is poured evenly over the ware which is then set aside to dry.

In preparing the piece for the kiln the bottom of each is sponged clean as to the edge, but the appearance of the under side will be improved if the glaze is left in the center. A connoisseur in pottery instinctively looks at the bottom of a piece and the clever worker will endeavor to have the bottom as well finished as any other part. There is an objection to the use of stilts in the kiln in that the three point marks are always in evidence. A better plan is to make circular supports out of a mixture of kaolin and flint. The size of these can be adjusted to each vase made and should be arranged so that the clean rim beneath the vase rests on a raised edge upon the supporting bat. The clay and flint mixture is so infusible that even if it adheres to the glaze it can easily be rubbed off with a piece of hard stone or a carborundum knife sharpener.

For coloring these glazes the usual metallic oxides, oxides of copper, cobalt, iron and nickel can be used. Cobalt oxide needs to be very finely ground for the strength of color is so great that even a small grain will produce a dark speck. If it be quite impossible to manage this the best plan is to use, not the

oxide but the nitrate of cobalt. This is soluble in water making a clear crimson liquid. A few drops of the solution put into the glaze mixture will produce the same effect as the oxide without the disadvantage of blue specks. The only objection is that the nitrate is rather more expensive. However, so small is the quantity necessary that the cost is scarcely noticed. The remaining oxides, copper, iron and nickel may be added to the glaze mixture and stirred in with the egg beater. For a light color the total amount of stain should not exceed one per cent, while three times this quantity is enough to produce a rich tone of color.

It may be well to add, for the information of any who have not read previous articles that copper produces green, to be modified in the direction of blue by cobalt and in the direction of yellow by iron; that nickel produces gray which can be modified in the same manner and that cobalt can always be relied upon for blue. Red is hard to secure but can be made with iron if the glaze is laid on in a thinnish coat over a light colored clay. Of course if a red clay be used for the pottery it may be left unglazed for the sake of the color.



Vase of White Chienlung Porcelain in Smithsonian Museum.

INDIAN GRASS

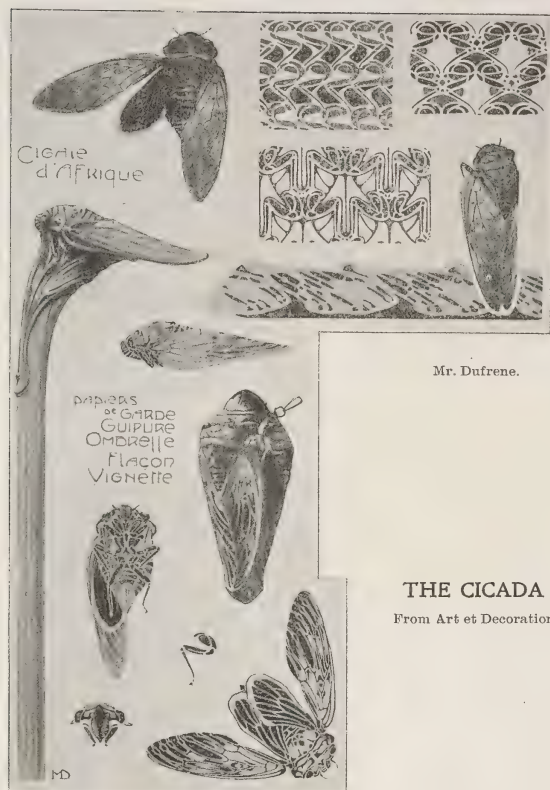
Kathryn E. Cherry

FIRST Fire:—Use Yellow and Blood Red pale for flowers; for shadow flowers use Blood Red and Violet. Leaves made of Moss Green, Brown Green, Shading Green and Black.

Second Fire:—Use Rose in high lights, Blood Red and Violet. Stems are Yellow Brown, Blood Red and darkest touches of Auburn Brown. Background, Violet, Yellow, Sea Green and Copenhagen Blue.



INDIAN GRASS—KATHRYN E. CHERRY



Mr. Dufrene.

THE CICADA

From Art et Decoration

WE have selected from a French magazine, "Art et Decoration," some drawings of the Cicada or "La Cigale" as the motif to be used in the next design competition of KERIC Studio. We have made this selection because, in the first place, the work is so well done, and in the second place, because so few of our designers seem to realize that the material for design is to be found all about us, not only in flowers and fruit, but in insects, animals, fish, landscape and the innumerable objects, little or big, to be had for the looking.

The problem for the March competition which will close January 15th will be to make a cup and saucer border not less than $\frac{1}{4}$ inch nor more than one inch wide, with or without supporting vertical lines of decoration of the cup. The motif

to be used is the Cicada in part or in whole. The first prize will be five dollars, the second prize, four dollars.

A careful study of the three detail drawings of "La Cigale"



Mr. Benedictus.



Mr. Bellery-Desfontaines.

by the three French artists Dufrène, Benedictus and Bellery-Desfontaines, will illustrate well how differently the same object will look to different artists' eyes—yet all tell the same fundamental truths. The different styles of conventionalization of each artist show still more clearly how unnecessary it is to copy others' ideas to attain artistic results. It is this originality in seeing things that proclaims the artist.

It would, of course, be preferable, if each designer could make his own study of the insect, but the time of year forbids, so, in order not to copy too closely the ideas of others he will

have to study all of these drawings and select the forms that appeal most to his sense of beauty and fitness, making his own conventionalization, profiting by the examples before him without servile imitation. It is interesting to note how M. Dufrène has made use of the leg and the head as motifs in wall paper patterns. "Everything is fish that comes to his net." Bellery-Desfontaines uses his motif in a semi-natural manner, while Benedictus skeletonizes his subject with admirable success.

Make your choice of these or other methods of conventionalization, "Every road leads to Rome."



Mr. Bellery-Desfontaines.



Mr. Bellery-Desfontaines.



BONESET—MARGARET OVERBECK

FOR Water color use for background Indigo and Crimson Lake with a little Hooker's Green to subdue it. For leaves and stems, Hooker's Green and raw Sienna or Brown Pink. Flowers, slight wash of Yellow Ochre and Sapphire Green. Outline Indigo and Sapphire Green.

FOR MINERAL COLORS.

For mineral colors—Leaves and stems, Olive Green and a little Yellow Brown. Background Violet of Gold and Dark Green. Flowers very light tint of Jonquil-Yellow and Black. Outline Dark Green.



DESIGN FOR BOWL—MAZIE E. MURPHY

The dark portion of design is in Lacroix Dark Blue toned down with Purple and Black. Leaves and narrow bands Yellow Green toned down with Black. Light ground in light wash of Yellow Brown.



LITTLE GRAPES—SARA WOOD-SAFFORD



HAREBELL—EMMA A. ERVIN (Treatment page 156)



BOUNCING BET—MARGARET OVERBECK

A delicate pink flower with pale green stems and leaf, very effective against a blue grey background.

PEACOCK PANEL

Olive Sherman

THE blue ground color, also the green at the base of the study, are rich in color and depth. The clouds, also parts of the tail feathers are etched into the china, and then carried out with the application of gold. The whole form is outlined in black, using a broader line for the bird and limb, thus throwing into the distance the clouds. The bird is executed in enamels and lustre. For a deep green purple effect with lustre for the feathers, use coat of Rose then Gold, burnish highly, lastly a coat of Yellow. Silver lustre is used for the limb and on the bird between the enamel.

TANKARD (Page 159)

Blanche Van Court Schneider

PAINT the apples with Poppy Red for the first firing, and in the leaves, use warm greens, browns and yellows with Dark Brown and Ruby Purple in the stems. Keep the apples round.

Second firing—The background at the top of the tankard is Banding Blue toning into Shading Green, then into Poppy Red. This last color forms the ground on the other side of the tankard. The color under the main cluster of fruit is rich Poppy Red shading into Brown Greens at the base of tankard. Use a little Pompadour on the apples this time and paint in the blossoms ends with black. For the third firing, vein the leaves and accent all parts to make the piece look finished.



HAREBELL (Page 155)

Emma A. Ervin

I DOUBT if any reproduction could give this little flower the delicacy and beauty of its natural state, for it is one of the most graceful and dainty of the mountain wild flowers. The general color is quite blue, very near purple, and on examining them carefully you will find some flowers from even a delicate pink shading into deep purple. The wiry, dark green stalk stands erect except as the wind bends it so easily and gracefully.



BONBONNIERE DESIGN

Mrs. Alice Witte Sloan

THIS suggestion for a decorative treatment of the peacock motif for a bonbonniere top, can be effectively executed in lustres and gold with perhaps a few touches of enamels. Some combinations for peacock tones in lustre are as follows: Dark Green over Purple, Dark Green over Ruby, Yellow Brown over Green, Yellow over Blue Grey; for the ground a delicate tinting of Yellow over Rose would give a pearly sky effect. Black lustre as the body of the bonbonniere would be most effective.



PEACOCK PANEL—OLIVE SHERMAN



BUNCH BERRY DESIGN FOR PLATE

FIRST draw a black outline of the entire design and fire it. Make the background and the edge design of Gold, leaving a black outline around edge design, filling the triangular space with flat black enamel; for leaves and stems, use light Green lustre; for flowers, flat White enamel with a center of

Yellow flat enamel; sepals of flat Apple Green enamel with a touch of black. In the third fire burnish the gold, shade the white and green enamels with green, the yellow center with yellow brown, cover the background with dark green lustre shading to dark, and strengthen the black outlines.



TANKARD—BLANCHE VAN COURT SCHNEIDER (Treatment page 156)

THE CRAFTS

WOOD CARVING AND PYROGRAPHY. LEATHER AND METAL. BASKETRY, ETC.

Under the management of Miss Emily Peacock, 6 Brevoort Place, Brooklyn, N. Y. All inquiries in regard to the various Crafts are to be sent to the above address, but will be answered in the magazine under this head.

All questions must be received before the 10th day of month preceding issue and will be answered under "Answers to Inquiries" only. Please do not send stamped envelope for reply. The editors will answer questions only in these columns.



Workman leading a window.



Workman cutting glass with the wheel.

MAKING A STAINED GLASS WINDOW

Henry L. Parkhurst

THE making of a stained glass window is a very simple matter merely as mechanically manufacturing an article goes, and involves only a fair amount of mechanical skill to bring together the only two materials used, which are lead and glass. But when it is to be artistically made, it calls for something more than mechanical skill alone. And an opportunity is offered to the lead glazier to show an appreciation of the artistic value of line in design, by making a good selection of the different sizes and shapes of leads, and in putting the solder on the joints in a manner to help bring out the drawing besides holding the window intact firmly. He is also given an opportunity to show an appreciation of color in his work, for a good selection of glass is dependent upon it, and a good color sense is as important to him as it is to a painter.

I consider therefore, that all of the artistic side of stained glass work is of greater importance than the mechanical. By this I do not mean that any part of the practical work might ever be slighted in the least. It must rather be very well and thoroughly done, and the window must serve its practical purpose perfectly. But the main principle of stained glass work is an artistic one, and it is the obtaining of good results through the use of such an unyielding material as glass that is the wonderful part of it all, and not merely the mechanical matter of construction. Yet I find as a rule that it is the latter that excites the layman's interest and wonder more than the former; and I am making it a point to speak of this at first so as to correct this mistaken point of view if the reader should have it.

The method of making a window, and the materials used, have changed very little since the Mediaeval days; practically not at all. We still use the full size cartoon, and make patterns by which to cut the glass, and have the same shaped leads which are soldered together in the same way. A few small improvements have been made, and some new ways invented for making windows; but they are not largely used.

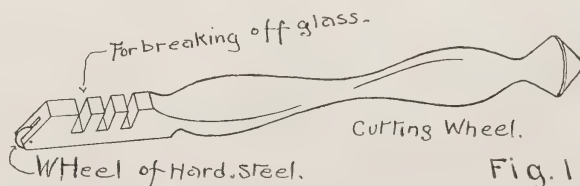
One of the improvements made in modern times is the

corrugating of the web of the lead to make it cling to the glass more firmly. Another is the use of tin floated over the surface of the leads to make them bright, and to add to their strength. One of the new ways to lead windows, is to cover the edges of the glass with very thin sheet copper, and then float over the joints with solder. Another is to use hard metal, zinc or copper, in the shape of raised leads, and solder the joints same as in regular leading. Some new shaped leads have also been made; and we now have the half round, the rectangular, the V shaped, and a few others more ornamental.

But still with all the little improvements and changes constantly attempted, and sometimes made successful, by far most of the work continues to be made in the old flat lead as it has been for ages. And probably a better method will not be discovered in many years to come, if ever discovered at all. For the lead, as used, is very flexible and easily handled, and it gives an artistic effect, and when puttied with putty that hardens, makes a strong window. So this article will be confined to the simple plain leading with flat leads.

Before describing the process of making a window, let us have a list of utensils and materials needed. First, the work should be done on a table about three feet wide and six feet long, made of pine, and having cleats on the back. This may be supported upon two wooden horses, or any support, as long as it is firm. The tools necessary are as follows:

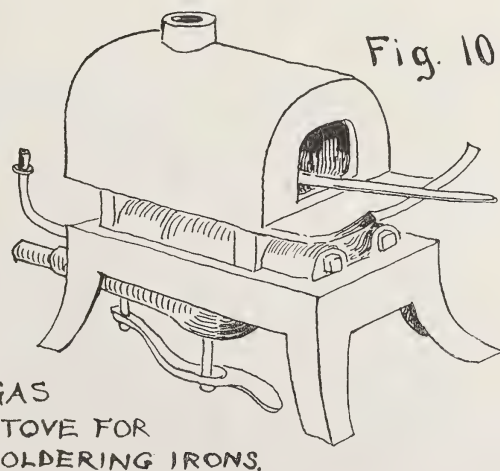
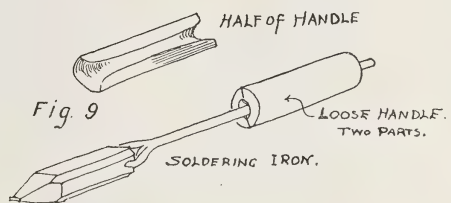
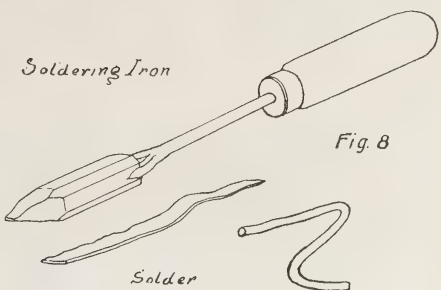
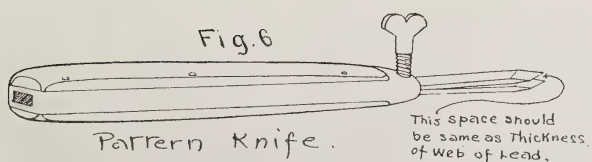
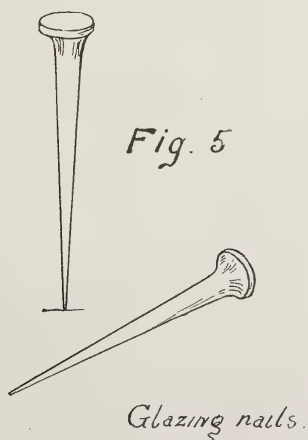
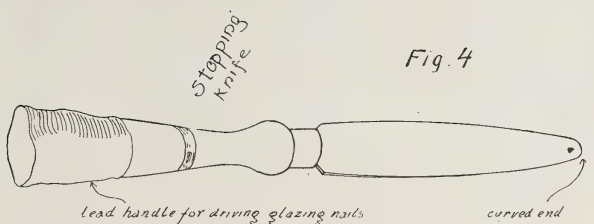
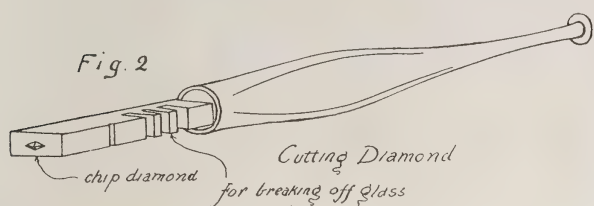
A wheel (Fig. 1) and a diamond for cutting the glass (Fig. 2)



The wheel for ordinary use, and the diamond for the hardest glass, and for cutting square lined pieces of clear glass. A

cutting knife to cut leads with (Fig. 3), and a stopping knife with which to press the leads and glass close together, and to drive in the leading nails (Fig. 4). Leading nails (Fig. 5). A

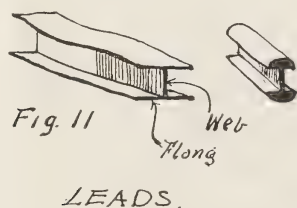
pattern knife (Fig. 6). A pair of plyers for grozing glass not all cut off by the wheel or diamond (Fig. 7). Two soldering irons (Fig. 8 and Fig. 9). A gas heating oven for the soldering



irons (Fig. 10). A cement brush, a pail for the cement (a four quart pail will do). A stubby house painter's brush, or a blacking brush will do for the cement brush. If you want to make windows for outside sashes or in fact anything larger than about two feet square, you will also need a carpenter's auger

and bit, large enough to bore holes for $\frac{1}{4}$ " rods, and a small detachable vise for the table to hold the sash in while you are doing this.

As for materials, you will want as follows: Manilla drawing and pattern papers, glass, lead, solder, powdered resin, or stearic acid, or paraffine candles for soldering, putty, boiled linseed oil, white lead, whitening, and possibly copper wire, iron rods and small brads for placing the glass in the sashes. The stearic acid may be obtained at a candle factory and may be applied with a brush to a joint before soldering. The powdered resin will be found cleanest and probably most easily used. Of glass you will want quite a little more in square feet of each kind than you intend to use for any particular work. And the kinds that are most generally in use are, common clear window glass, cathedral glass, and opalescent glass. The cathedral glass is colored, and is all one flat tint, and comes in various colors. Opalescent glass also comes in various colors, but there may be a variety of tints, and colors, and combinations of colors in one piece, or it may be nearly one flat tint. Cathedral glass is semi-transparent sometimes, but opalescent is only translucent, and sometimes it is almost opaque. All glass comes in sheets and you have to cut out of the sheet what you want to use. Leads that are sold by the dealers are called Lead Cames (Fig. 11) and as sold are too heavy for leading a window, and you should have them run through a mill and



made thin. Solder comes in two forms; one round like heavy wire, and the other flat like a thick shaving.

The first thing to do in making a window, is to draw out your design; and if it is at all elaborate, or has any ornament requiring any study, it should be drawn at a small scale first; and if it is to be a colored window the scale drawing should be carefully colored. The effect of a design that is at all ornamental should always be studied in this way first, because in doing this you bring the whole more within your easy vision, and you do the same thing as putting your work away from you to see it at a distance. From your scale drawing make a full size drawing or cartoon. And in making this everything must be drawn out in full with care, and no part can be omitted without finding out eventually that you might better have drawn it. Even if the window contains nothing more than plain diamonds or squares, the whole must be drawn out in full. In establishing your full size, don't forget that there are two sets of sizes; the full or actual size, and the sight size. The full size is the dimension from the inside of the groove or rabbet in the sash into which the glass is set and puttied, and is the actual or over-all size of the piece of leaded glass. The sight size is the dimension of the opening in the clear from the inside edge of the sash, and gives the size of all the glass that is seen when put in the sash. The design should all come within this size.

When the first full size drawing or cartoon, which we will call No. 1, is made, it should be transferred to another sheet or

paper stiff enough to make patterns of. The paper used for drawings may be common manilla drawing paper unglazed. But that for the patterns will be better if glazed a little. After the pattern drawing is made, cut a pattern for each of the different shaped pieces of glass, using the two bladed pattern knife. One pattern will of course answer for those shapes that are repeated. Before cutting the patterns, don't fail to number them all, and copy the numbers correctly on the original drawing. When the patterns are all cut and the different kinds of glass selected for the window, begin the glass cutting and continue until all of it is finished, and do not try to lead your window until this is done. As you finish each piece, place it with its pattern in its proper place on the original drawing which should be spread upon the table for this purpose, and in this way you can keep track of what you are doing and avoid confusion and loss of the pieces of glass.

When working in colored glass, it is usually desirable to see the effect of the glass you are selecting as you proceed. And to do this you should have a sheet of rough plate glass as large as your window, or at least the portion of it that is colored. On this trace roughly the outline of your design, and place it upright in front of a window either upon the sill, or a board nailed across the opening for a shelf. As the pieces of glass are cut, stick them in their proper places on this glass screen or easel, with small bits of soft beeswax or other wax that is sticky and pliable. When they are taken down for glazing, all the wax should be carefully removed.

In cutting the glass, first cut out a piece roughly large enough to hold the pattern, and then holding the pattern firmly against it, cut around close to the edge using the wheel or the diamond. The wheel will often be found better for irregular shapes because it is more easily turned. The manner of holding the diamond or wheel is shown in one of the illustrations, and you will find it necessary to bear hard upon the glass so as to break through the outer surface. That part of the glass to be cut off can then be removed by using the plyers, or if your grip is strong enough you can do it with your fingers. But there is the danger of receiving a bad cut from sharp edges of the glass. If you do not use the plyers, use the slots in the wheel handle. Another and safer way to remove these portions is to tap the glass on the under side, striking directly under the cut line, and it will fall off. Sometimes it is impossible to remove the glass by any of these methods, and then you will have to groze or pinch it off a little at a time with the plyers. Be sure to take everything off up to the pattern line.

When all the glass is cut, prepare for the leading by tacking drawing No. 1 on the table, and nail wood slats about $\frac{1}{4}$ " thick and an inch wide around the edge. These slats should be laid perfectly straight and square, being at perfect right angles with each other at the corners, and the dimensions across the space they enclose should be the exact full size of the window. These slats are necessary to keep the work straight and confined to this size. The work of leading is done right on top of the drawing and you should begin at the near left hand corner, by placing across the end and along the side a heavy lead, say at least $\frac{1}{4}$ " wide. Place them full against the slats, and then begin with the corner piece of glass and the lead next to it, and then the next piece of glass and the next lead, and so on across the drawing diagonally until the whole is completed. As you proceed, keep the pieces of glass and the leads you have just put in place, firmly in their positions by driving the leading nails against them and into the table. These nails are to be taken out again of course when you place the next lead and glass.

TO BE CONCLUDED.

ANSWERS TO INQUIRIES

Bet.—White calf is delightful to work on, but be sure that you buy Sumach tanned skins, the alum tanned skin turns yellow, as soon as water touches it. Cow hide can be more deeply tooled than calf.

E. B.—Knives for cutting leather can be bought from almost any large hardware dealer and cost from twenty-five to fifty cents.

C. S. R.—Zinsser Bros., 197 Williams St., New York, sell a laquer for leather. There are different laquers for metal. Banana oil is one of them, this leaves a thin skin on the object laquered and excludes the air; but why use a laquer? there is nothing that gives such soft mellow tones as atmosphere.

C. A. D.—For tooled leather work you will need some cowhide or calf-skin. (The cowhide is the heavier of the two, so more suitable for heavy tooling and carving.) Some small wedge shaped steel tools for outlining, different sizes, two or three background tools, a hammer and a stone to work on, a piece of marble will do. For instruction in this work look up Crafts Dept., May issue, 1903.

ANSWERS TO CORRESPONDENTS.

H. M. P.—For pink, use first a thin wash of Pompadour and in the second fire finish with Rose. Few pinks will come out of the fire without purplish tones if overfired. If your Dresden Yellow comes out with black specks and no other color does the same, we would say something is wrong with the color and you had better throw it away and buy a new one, if it comes out in the other colors we would think the fault was in the china or that the iron firing pot needed whitewash to prevent particles of iron spitting off on to the china. We can suggest no remedy unless it is possible to make an all over pattern of gold and enamel to cover the spots. If your gold comes off in burnishing it is either underfired or a very poor quality of gold.

Mrs. E. B. D.—The article on figure painting in last month's K. S. applies equally as well to miniature painting in mineral colors, the process is exactly the same.

R. R.—If your lustre comes spotted from the kiln, it is due to one of several reasons. If the spotting is due to too much turpentine in the outlining either use less turpentine or fire the outline before putting on the lustre. The spotting might be caused by dampness on the china from the hands; it is best to handle freshly dried lustre with an old silk handkerchief, use this to dust off the piece before firing, which will also prevent spots.



BLUE AND WHITE PLATES—EMILY F. PEACOCK

USE for the first fire grey blue colors all over the plate. For the second fire a second coat of grey blue over the rim only. For the third fire, use a medium dark blue flowing enamel in the background design, for the inner line, and on the

outside edge of the plates. These border designs could be adapted to metal, for bowls and trays especially where etching is used. Also for carving in low relief on wood, for bread boards.



No. 1.



No. 2.



No. 3. Stencil Border design for portiere.

STENCILS

Clifton Windsor White

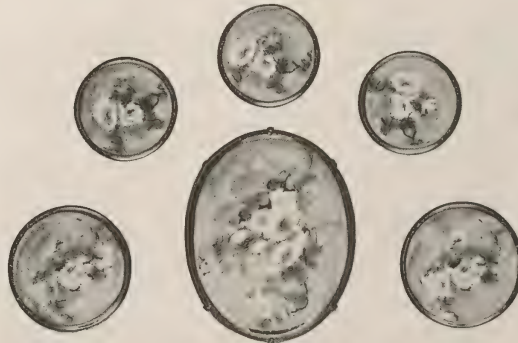
THE stencils illustrated, designed by Clifton Windsor White, can be applied to leather and textiles, for table, cushion, and chair coverings, etc. The butterfly motive, No. 3, has been successfully used as a border along the bottom of portieres. This design could be put on, with or without enclosing lines, as preferred. One quarter of the stencils No. 1 and 2 suggest also a motive for border designs.

Practical suggestions for the application and uses of the stencil, will be found in the August issue.

MINERAL TRANSFERS

FOR CHINA DECORATION IN ALL ITS BRANCHES

SPECIMENS OF BUTTON DECORATION.



PALM, FECHTELER & CO.

80 FIFTH AVE.,
NEW YORK.

45 LA SALLE ST.,
CHICAGO.

1ST NATIONAL BANK,
EAST LIVERPOOL, O.

APPLY TO YOUR SUPPLY HOUSE FOR
SAMPLES AND INFORMATION. . . .

KEEP THE FIRE ALIVE.

KERAMIC STUDIO



DEC. MCMIV

Price 35c.

Yearly Subscription \$3.50

A MONTHLY MAGAZINE FOR THE POTTER AND DECORATOR.

CONTENTS FOR DECEMBER 1904

	PAGE
Editorial	165
League Notes	165
Brush Work—continued	166-167
Child's Bread and Milk Set	167
Bread and Milk Set	168
Dado for Child's Room (see color supplement)	169
Holly and Mistletoe	169
Dado for Child's Room	170
Scarlet Bean (color supplement)	170
Bo-Peep Plate	171
Bowl and Pitcher for Child's Room	172
Child's Bread and Milk Set	173
Studio Notes	174
Dragon Fly Design for Bowl and Plate	174
Plumbago	175
Child's Set	176
Child's Set (Prize May competition)	176
Child's Set in Blue and Green (1st Prize)	177
Tray for Wash Bowl and Pitcher	178
Gourd Study	178-179
Fire Place and Hearth	180
Child's Set	180
Tiles for Mantlepiece in Child's Room	181
Child's Bread and Milk Set	182
Roses	183
Dado for a Child's Room—Gourd Motif	184
Children's Set	184
The Crafts—Making a Stained Glass Window—cont'd	185
Children's Drinking Cups	186-187
Answers to Inquiries	187
Answers to Correspondents	188
Bowl	188
Belle Barnett Vesey	165
W. P. Jervis and F. H. Rhead	166-167
Margaret Overbeck	167
Lucia A. Soule	168
Edith Alma Ross	169
E. Aulich	169
Edith Alma Ross	170
Leta Horlocker	170
Nina Lunn	171
Austin Rosser	172
Austin Rosser	173
E. Laura Ripley	174
K. E. Cherry	175
Sabella Randolph	176
Sabella Randolph	176
Marie Crilley Wilson	177
Austin Rosser	178
Margaret Overbeck	178-179
Edith Alma Ross	180
Sabella Randolph	180
Edith Alma Ross	181
Charles Babcock	182
I. M. Ferris	183
Margaret Overbeck	184
Sabella Randolph	184
Henry L. Parkhurst	185
Emily Peacock	186-187
Edith Alma Ross	188

Some Leading Agencies of Ceramic Studio

We take pleasure in mentioning a few of the leading agencies for the sale of the KERAMIC STUDIO, where, also, subscriptions may be placed:

Boston, Mass.—Miss E. E. Page, 286 Boylston St.; Smith & McCance, Old Corner Book Store.
 Brooklyn—A. D. Mathews & Sons, Fulton Street.
 Buffalo—Mrs. Filkins, 609 Main Street.
 Chicago—A. C. McClurg & Co., Brentano's; Burley & Co.
 Cincinnati—Miss M. Owen, 245 Elm Street; A. B. Closson, 4th Street near Race; Traxel & Mass, 4th Street, near Elm.
 Cleveland, Ohio—Vinson & Korner, 150 Euclid Ave.
 Columbus, Ohio—Lee Roessler, 116 So. High Street.
 Dayton, Ohio—W. W. Kile & Co.
 Denver, Colo.—E. Meininger, 807 16th Street.
 Detroit, Mich.—L. B. King & Co.
 Hartford, Ct.—E. M. Sill.
 Grand Rapids, Mich.—Miller, Wolfe Co.
 Indianapolis, Ind.—Keramic Supply Co., Lemeke Building.
 Kansas City, Mo.—Emery, Bird, Thayer Co., Geo. B. Peck Co.
 Louisville—Louisville Book Store.
 Minneapolis, Minn.—Minn. Art China Co., 607 1st Ave. So.

New York City—Brentano's, Union Square; M. T. Wynne's, 11 E. 20th St.; The Fry Art Co., 36 W. 24th St.; Wanamaker's; American News Co. J. B. Ketcham, 107 W. 25th Street; M. J. Whaley, 430 5th Ave.
 Newark, N. J.—Keramic Novelty Co.
 Oakland, Cal.—Smith Bros.
 Omaha, Neb.—Megeath Stationery Co.
 Philadelphia—Wanamaker's.
 Pittsburgh, Pa.—Otto Schaffer & Bros.; Kurtz, Langbein & Schwartz; R. S. Davis & Co., 346 Fifth Ave.; John G. Yergan, 36 Fifth Street.
 Reading, Pa.—Rowland's Book Store.
 Saratoga Springs—Robson & Adce.
 San Francisco—Mrs. M. E. Perley, 207 Post Street.
 Sioux City, Ia.—J. K. Prugh, 312 Nebraska Street.
 St. Louis—F. Weber & Co.; A. S. Aloe & Co.
 Syracuse—Wolcott Book Shop; Welch & Hollingsworth; W. Y. Foote; A. L. Varney & Co., 336 S. Salina Street.
 Tacoma, Wash.—Art Exchange, Mrs. Mead.
 Toronto—The Art Metropole.
 Warren, Pa.—Alzora Bashline.
 Washington, D. C.—Woodward & Lothrop.
 The Magazine may also be ordered from any news dealer or book store in this country, who can procure it through the American News Company New York, or its branches.

KERAMIC STUDIO

Vol. VI, No. 8

SYRACUSE, NEW YORK

December 1904



CHRISTMAS brings unusual opportunities for the exploiting of all kinds of ceramic work. It has seemed to us that for this reason, if for no other, our subscribers will be pleased with the effort we have made to give them a real "Christmas" number, especially for the children, for whom especially Christmas exists.

It is well understood, of course, that these designs, while applied to special ceramic form, are available for all sorts of crafts work. On china the tile designs as well as those for children's sets, can be adapted to all sorts of dishes—oatmeal sets, toilet sets, mugs, steins, etc., etc.,—while in silver or other metal they may be adapted to cups, boxes, trays and numberless articles. In wood, many of these designs may be stained or carved for bread or other trays, boxes of all kinds, screens and panels in furniture, even for basketry and weaving many of these designs can be made available by simplifying and arranging.

We have put much thought on this Christmas number and we trust that our friends will be proportionately pleased.

✦

The Fall competition, as expected, has far surpassed any of the former efforts in the quality of the work submitted. The "Dado and 'Fire-place'" problems were the only ones not well understood by contributors, but the solutions offered by Miss Overbeck and Miss Ross (1st and 2d prize) were very satisfactory. The dado by Miss Overbeck was especially good in spacing but the design was not particularly appropriate for a child's room. The border of the dado by Miss Ross is given as one of our Christmas supplements.

The color schemes for the child's set (first prize, Marie Crilley Wilson and second prize, Sabella Randolph) were very fine, we expected to have given these as Christmas supplements but we had not time to do it.

The second prize child's set by Miss Austin Rosser, was especially attractive in its simplicity and the quaint drawing of the motif. The shapes of the bowl and pitcher however, were not as good as the others.

The number of good suggestions for tile window boxes and tea tiles made the awarding of prizes exceedingly difficult. The awards for the full competition were as follows:

Dado in tiles for child's room:

First prize, \$15.00—Miss Margaret Overbeck, Cambridge City, Ind.

Second prize, \$10.00—Miss Edith Alma Ross, Davenport, Iowa.

Design for fire-place and hearth in child's room:

First prize—Not awarded.

Second prize, \$10.00—Miss Edith Alma Ross, Davenport, Iowa.

Child's set of three pieces:

First prize, \$20.00—Mrs. Marie Crilley Wilson, Newark, N. J.

Second prize, \$10.00—Miss Austin Rosser, Butler, Mo.

Second prize, \$10.00—Miss Sabella Randolph, Alfred, N. Y.

Design for tile window box:

First prize, \$10.00—Miss Edith Alma Ross, Davenport, Iowa.

Second prize, \$5.00—Miss Mary Overbeck, Cambridge City, Iowa.

Design for tea tile or flower pot stand:

First prize, \$6.00—Miss Edith Alma Ross, Davenport, Ia

Second prize, \$4.00—Mrs. Earle Sloan, Charleston, S. C.

✦

The subject for the first monthly competition which closes January 15th, 1905, is the Cicada as illustrated in November KERAMIC STUDIO. The problem for the next monthly competition, closing February 15th, 1905, will be a naturalistic study of some flower which blossoms in December or January.

In these studies, careful note must be made of balance of masses, spacing, harmony and beauty of line—dark and light as explained by Mr. Hugo Froehlich in his articles on design, in KERAMIC STUDIO. This study is to be made in India ink wash drawing, and accompanied by details in pen and ink and a treatment for mineral colors or water color or both. First prize, \$8.00; second prize, \$5.00.

✦

We wish to remind our readers who wish elementary instruction that they will find much useful information in the answers to correspondents and when they wish instruction on any special point, they have only to write and they will be answered in those columns. That page is especially for beginners, although it is open to advanced workers.

✦

In the October number of KERAMIC STUDIO, we failed to give credit to Mr. Jarvie, the "candlestick maker" of Chicago, for the information about "Bayberry dips."

✦

Any one sending designs to competitions or at other times and not hearing from them, kindly notify us as often the names are missing, or designs do not arrive.

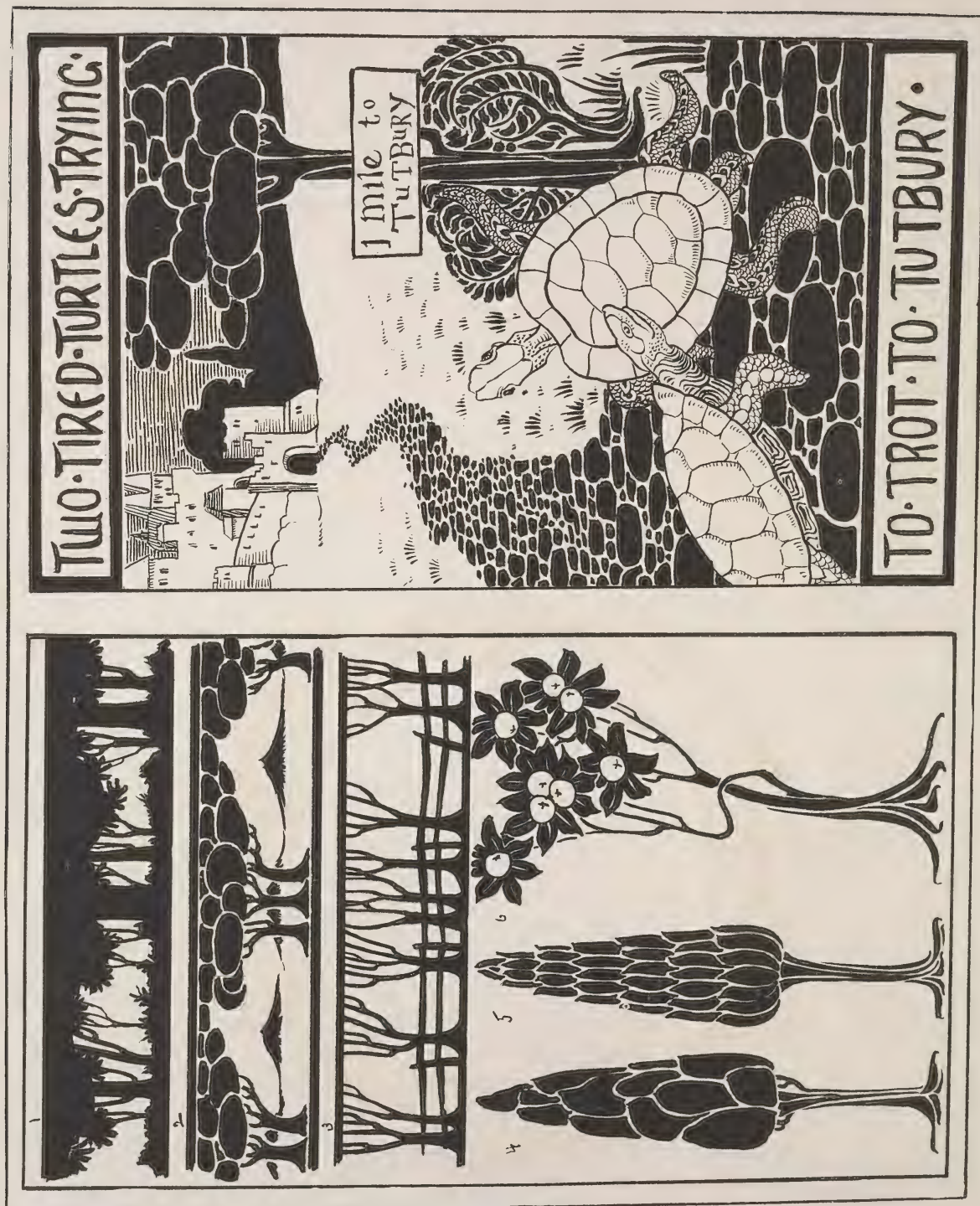
✦ ✦

LEAGUE NOTES

WE take pleasure in informing our members, that the bowl and vase manufactured from League designs for this year's study course, can now be procured through local dealers, or from the Ceramic Art Co., Trenton, N. J. As the shapes are pleasing in themselves, our students of design will have little difficulty in creating interesting decorations for them.

Art leaders in Chicago, who have seen our educational plan, are in sympathy with us, and will coöperate with us as long as we pursue our present method. They have granted us the privilege of holding our opening exhibition at The Art Institute in May. One member has written, "I shall do all the work of the study course myself, probably two or three solutions of each of the seven problems, and shall do all in my power to kindle interest and enthusiasm in others to do the same." Believing that other members will fulfill their duty to themselves and to the League by responding liberally we are planning extensive arrangements for this opening exhibition.

BELLE BARNETT VESSEY,
President.



BRUSH WORK

W. P. Jervis and F. H. Rhead.

LESSON 5

HINTS OF METHODS EMPLOYED IN DRAWING TREES

WE give in this lesson three bands with different schemes for trees. The effect in Fig. 1 is often seen in the evening when the sun is behind the trees. Before painting the trees, wash in a ground with a rich cadmium orange, then paint the trees generally in tones approaching black, mixing the colors as you go along, varying from a dark purplish to a blueish green, being careful to keep the depth about the same, but just varying the tone. In other words try to get such an effect as would be seen when the evening sun makes a silhouette of the trees against the sky. An Italian effect can be made with Fig. 2 if painted in bright colors. Use a light blue for the sky, with a yellow green foreground, rich green for the foliage and burnt Sienna for the trunks of the trees. In Fig. 3 only two colors are needed, light-violet for the sky, and the trees and fence in raw amber. Fig. 4 and 5 show two different methods of treating poplar trees, and Fig. 6 is a conventional treatment of an apple tree. The panel with the alliterative inscription is suitable for either burnt wood or pottery in underglaze colors. If used for pottery, divide the panel in two portions for the first treatment, the foreground and the sky. The details will come later and will be laid on over the first wash. On the lower portion from the horizon downwards, paint in warm yellow green, but let it be lighter and colder at the top, and stronger and warmer at the bottom. The castle is to be white

with red brown roofs. Get the white scrape off the ground color with a scraper and later the lines and shading can be done lightly in cobalt blue. The trees at the back of the castle should be a dark cold green. The pebbles on the path in different tones of russet green and brown. Trees in the foreground in olive green, with the trunks in chocolate brown; the shrub at the back of the tree in dark olive green. The "Tired Turtles" should have the shells in orange with the lines traced in dark red brown. The signs can be in russet brown with dark brown letters, or the letters in black on a peacock blue background. The best medium to use with the colors is turpentine and fat oil, but in this case it will be necessary for the pieces to be hardened on before glazing so as to burn out the oil. If the colors are mixed with water and a suspicion of mucilage this hardening on fire is not requisite. When the glaze is applied the slab should be fired flat in the kiln to prevent the colors running, but should the kiln be too small to admit of this the piece should be very lightly glazed. Remember that browns fire away more than other colors and if a strong wash is required go over it twice.



CHILD'S SET—FIRST PRIZE. (Page 176)

Sabella Randolph

TINT the plate a light cream, using Ivory Yellow with a touch of Brown Four. After firing, paint the design in Royal Green; light for the background. Panels—carry out the design in a mixture of Banding Blue, Royal Green and Black to make a medium tone of dull greenish blue.



CHILD'S BREAD AND MILK SET—MARGARET OVERBECK

Figures and band in green gold, and background a deep cream or light yellowish green.



BREAD AND MILK SET—LUCIA A. SOULE

This design is to be carried out in grey green for trees and blue grey for rabbits, or the rabbits might be a light brown. A rich effect is also obtained by making the rabbits, ground and trees in gold, the leaves in green gold, outlines of black, brown or red may be added if desired.



DADO FOR CHILD'S ROOM—SECOND PRIZE—EDITH ALMA ROSS (Treatment page 170)



HOLLY AND MISTLETOE—E. AULICH

The berries of the Holly are of bright red color, use Yellow-red and Pompadour to shade. The Mistletoe is greenish white transparent, the leaves are yellowish and blueish green.

DADO FOR CHILD'S ROOM (Supplement and page 169)

Edith Alma Ross

GROUND of the tiles is first tinted with ivory yellow, then fired. The background is then tinted with grey green. The birds and berries are painted with dark green No. 7, the tree trunk in Brown 4 or 17, the crests in orange red. The outlines are then added in black. This design is to be applied to two 6 inch tiles and repeated for a border. The smaller bird panel has the crest in dark green, the bird in light green, otherwise the treatment is the same as for the larger panels. Alternate the small tiles with plain tiles simply tinted in the background color.



MOTIF USED IN DADO FOR CHILD'S ROOM—E. A. ROSS.

CARNEGIE TECHNICAL INSTITUTE

MR. Peter Korzelius, a modeler of Trenton, N. J., will probably be made the chief of the ceramic department at the new Carnegie Institute in Pittsburg. He has submitted to the directors the following curriculum:

Department 1.—Drawing, designing, modeling, mould-making, throwing, turning, history of ceramics, history of art.

The beginner must first acquire facility in the use of the pencil by copying designs. Then he is taught to exercise his skill in combining simple forms to produce complex ornamental designs. Explanatory lectures, teaching the rudiments of clay modeling, and covering ornamental designs suitable for porcelain or china.

For those already in the pottery trade, instructions in modeling in different styles; to lay on, trace or work design in the piece itself. Design and decoration of embossing, etc. The method of throwing on the lathe and turning all forms and sizes. Turning on hand jiggers, lathes and wellers to measurement; completing and polishing pieces suited for squares, ovals and oblongs, etc. The mixing of plaster of various strengths, suitable for blocks, casting and pressing; also for plaster casts; staining, varnishing, etc.

Department 2.—Chemistry, physics, geology, ceramic

technology (body, glaze compounding, color making, material testing), light study, heat study, firing mechanics, ceramic machinery, kiln building, French, German.

Department 3.—Anatomy, drawing from life; theory of color harmony, contrast, etc.; china painting and stained glaze, color harmony, contrast, etc.; china painting, over glaze and under glaze, including colored slip painting and stained glaze.

Degrees to be conferred—A. M., B. Sc., or Ph. D., according to studies and efficiency.

SHOP NOTE

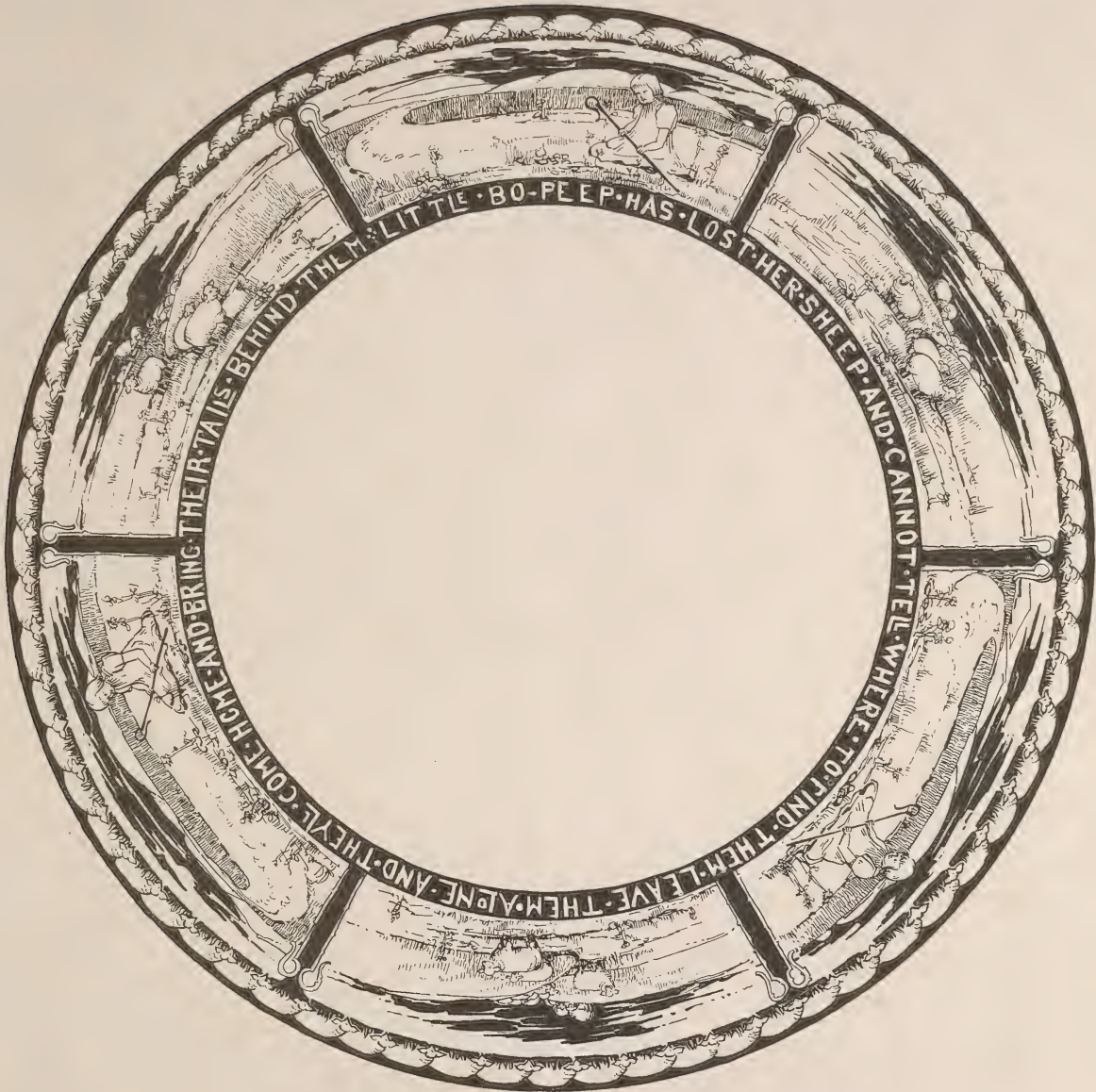
The Willets Mfg. Co. are sending out their new illustrated catalogue for china decorators.

SCARLET BEAN (Supplement)

Leta Horlocker

FEW seem to realize the decorative possibilities of this most attractive old fashioned flower. The vivid color of the flower in graceful clusters, the large masses of leaves to set them off and the harmonious curves of the vine, all lend themselves most effectively to decoration. The panel shows an arrangement which could easily be repeated around a vase and give a semi-naturalistic treatment that would be wholly decorative. The ground of the panel is grey green over neutral yellow, the leaves and vines are in royal green over neutral yellow, in fact the entire ground is first tinted neutral yellow and then fired before the design is painted. The scarlet flowers are painted in orange red, pompadour and Meissen brown. The outlines are painted in black.

Scarlet Bean
Leta Horlocker

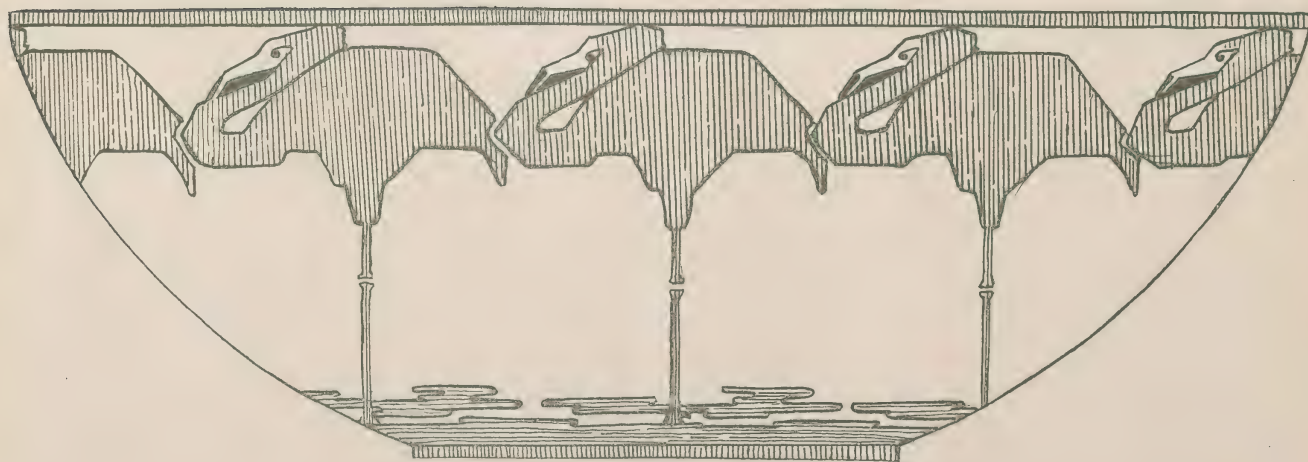
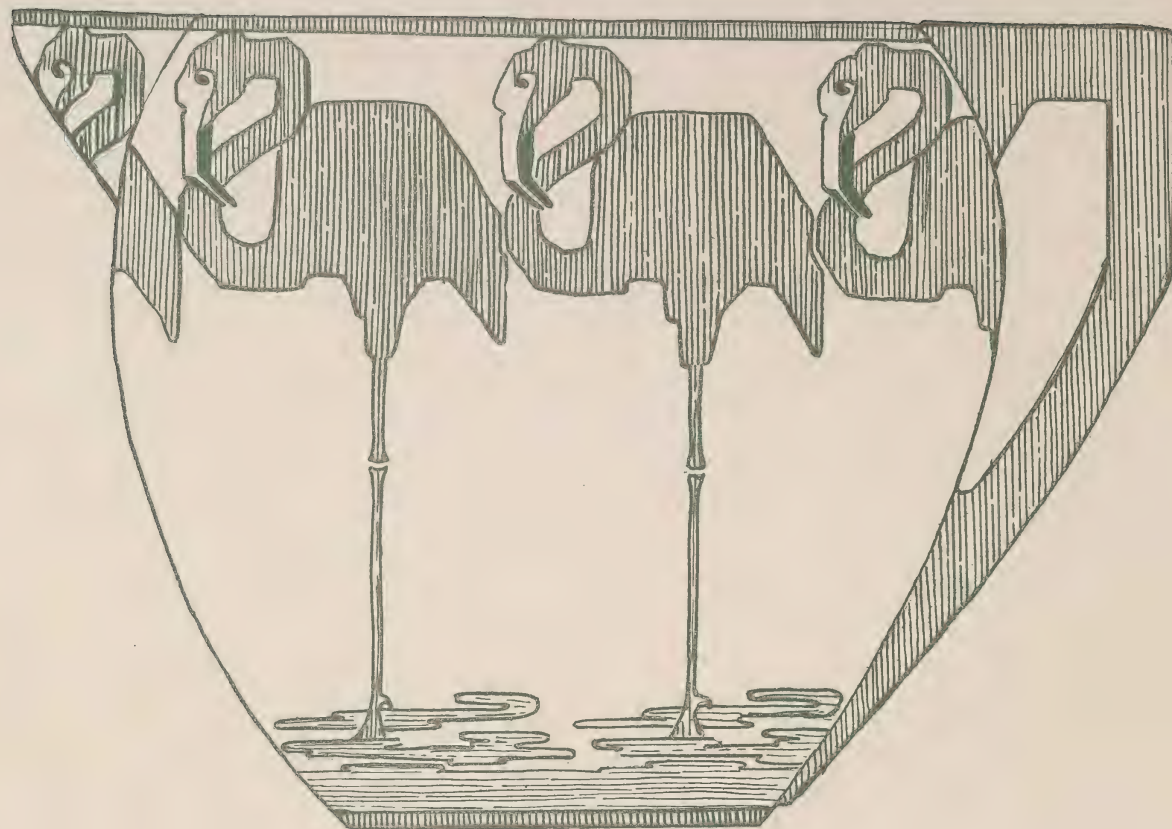


"BO-PEEP" PLATE—NINA LUNN

KEEP all tones flat, working up with or without outlines. Use for sky and dress a light blue, roads, flesh and hair, a sandy yellow, fields, hills and foreground details a medium warm green, dark bands and clouds, outlines and staffs a dark warm blue-grey—Copenhagen Blue with a little warm grey or red added—leaving sheep and lettering white. Accenting

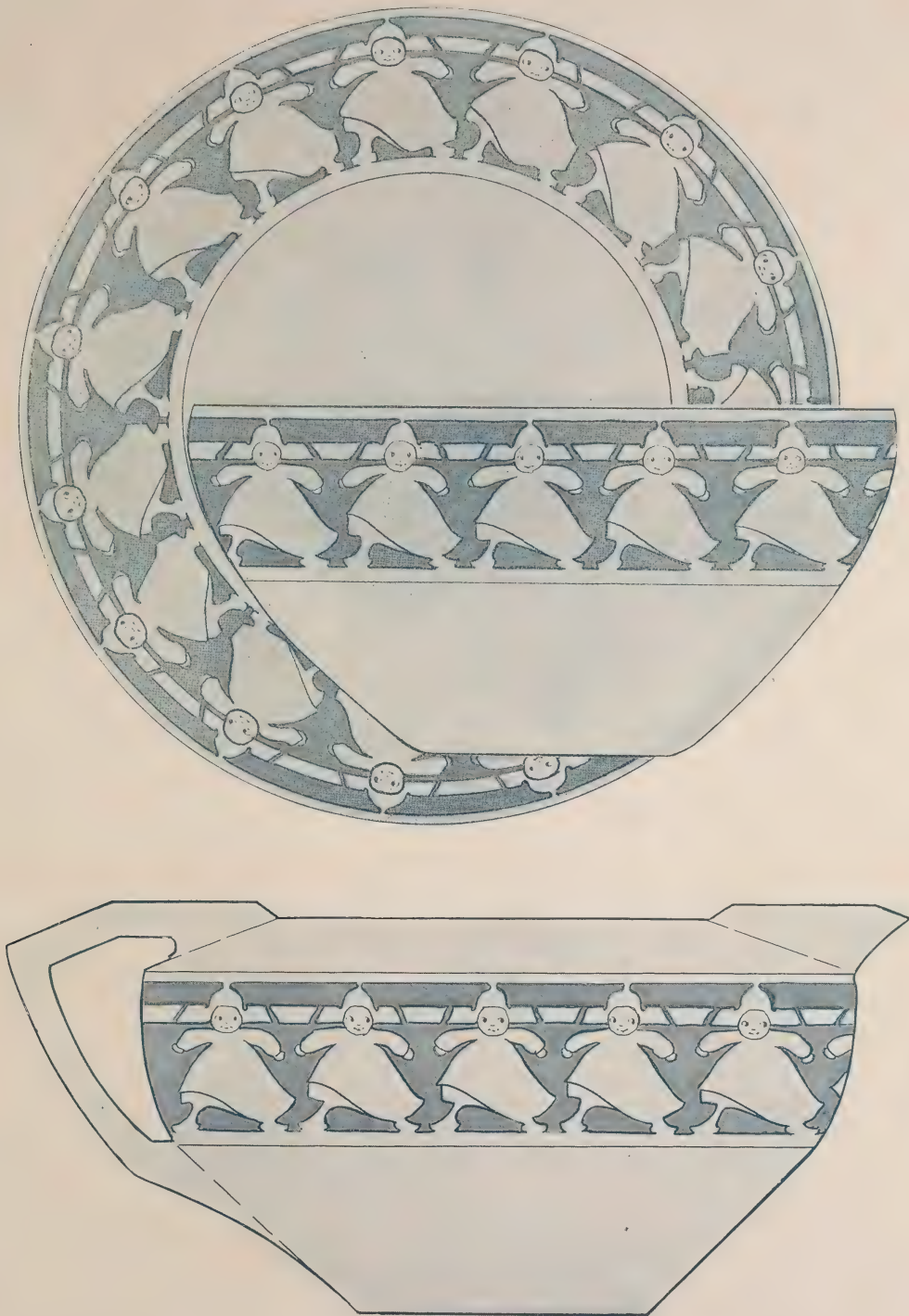
and outlining with dark grey. The secret of making the color combination attractive is in keeping the values equal with the exception of the dark grey which should give strength to the whole design.

This would also be attractive worked out in all grey-blue and white.



BOWL AND PITCHER FOR CHILD'S ROOM—AUSTIN ROSSER

This design is to be executed in dark blue and blue grey on a white ground or in a grey green with dark blue outlines. For a more showy effect the design might be carried out in green or other color and gold or in lustre with black outlines.



CHILD'S BREAD AND MILK SET—SECOND PRIZE—AUSTIN ROSSER

Carry out in any color, avoiding much contrast of tones, and keeping outlines soft and rather broad.

STUDIO NOTE

We have just received an interesting little circular from the Misses Heath, Harcourt Studios, Boston, showing the work of children in their manual training school of art, after the methods of J. Liberty Tadd. The circular is well illustrated with half-tones showing the children at work.

The New York Society of Ceramic Arts held its regular November meeting as usual, at The National Arts Club, West 33d street. The Society was addressed by Mr. Charles Lamb of the well known firm of makers of ecclesiastical stained glass.

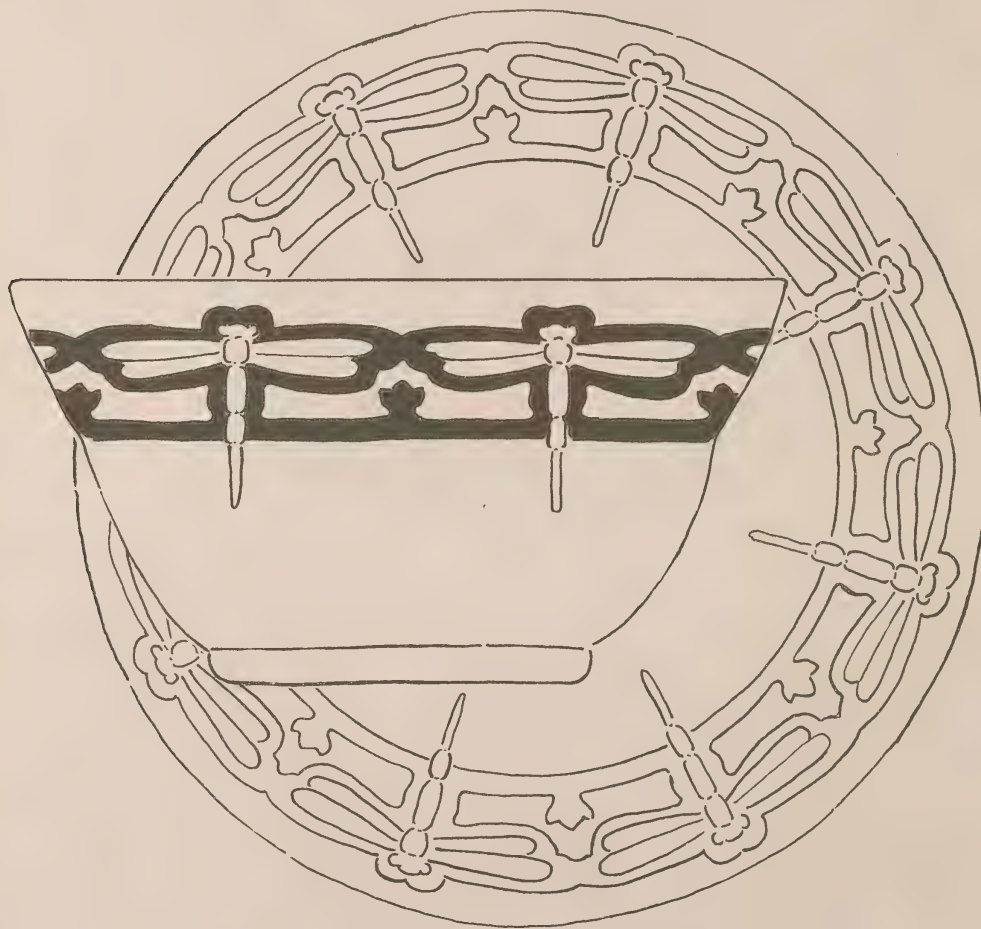
PLUMBAGO

K. E. Cherry

FIRST fire—Flowers, use Sea Green and Deep Blue Green, use Violet with same for those in shadow; the greens are a blueish cast; use Moss with Sea Green and shading with Black for darkest tones.

Second fire—Flowers, shade Banding Blue and Violet touches in center of Banding Blue and Black. The buds have touches of pink on them.

Background—Use Copenhagen Blue, Violet, Yellow and Yellow Brown.



DRAGON FLY DESIGN FOR BOWL AND PLATE—E. LAURA RIPLEY

Two color schemes are suggested for this design.

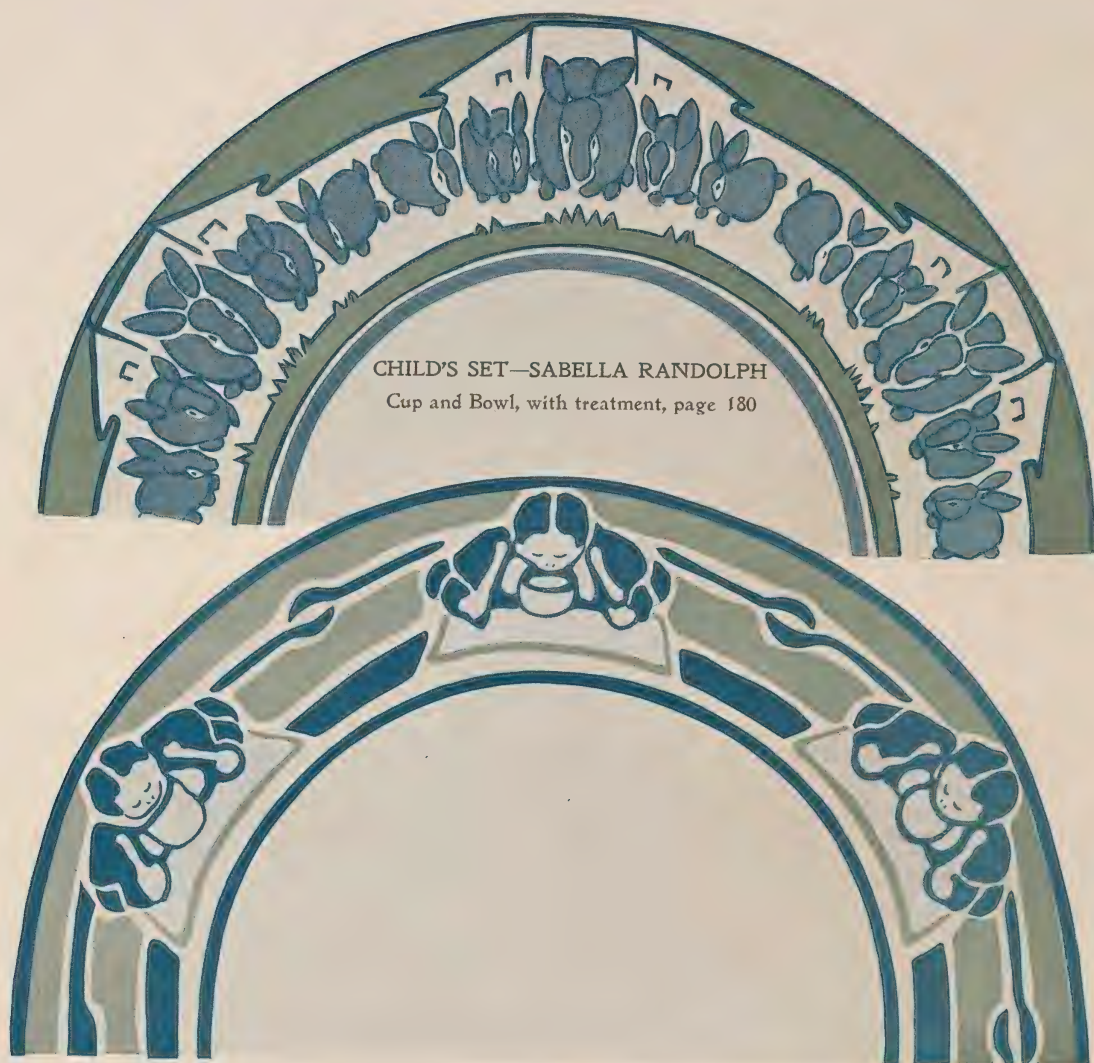
No. 1. Tint all over with Albert or Orange Yellow and fire.

Tint edge with Brown Green, dragon flies, Apple Green; wide margin around design, Pale Yellow; outline Brown.

No. 2. Tint all over, Pearl Grey with a touch of Blue Green and Apple Green, fire. Then tint margin Violet a shade deeper than background of border; dragon flies, Apple Green shaded with Violet; margin around dragon flies, Jonquil Yellow; outlines, Violet or Gold.



PLUMBAGO—K. E. CHERRY



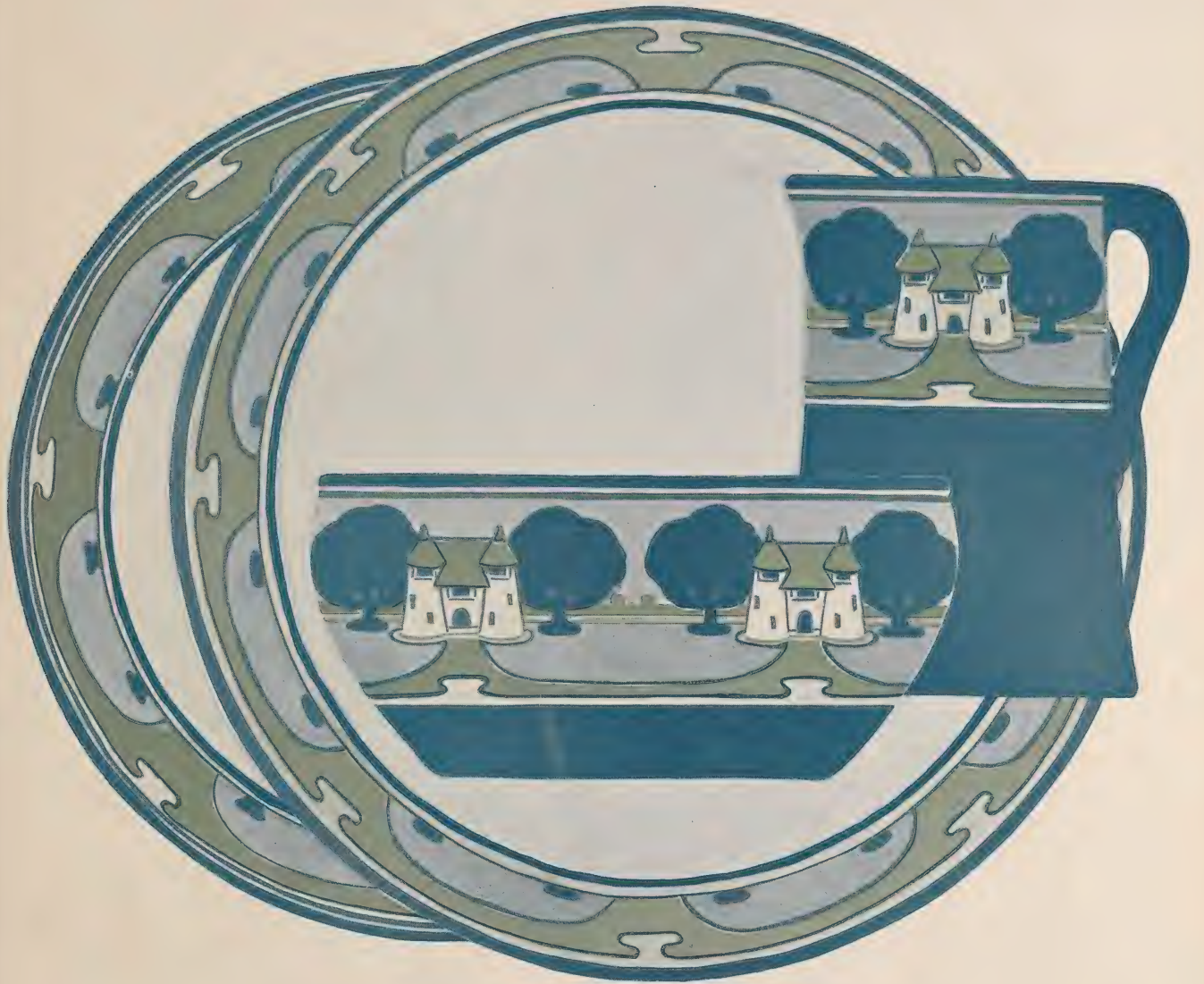
CHILD'S SET—FIRST PRIZE (May Competition)—SABELLA RANDOLPH (Treatment page 167)

DECEMBER 1904
SUPPLEMENT TO
KERAMIC STUDIO

BIRD DECORATION FOR TILES--EDITH ALMA ROSS

COPYRIGHT 1904
KERAMIC STUDIO PUB. CO
SYRACUSE, N. Y.





CHILD'S SET IN BLUE AND GREEN—FIRST PRIZE—MARIE CRILLEY WILSON

INTERESTING DISCOVERIES IN CRETE

TWO kinds of pottery found by Miss Harriet Boyd in her archaeological researches in Crete, for the University of Pennsylvania, this year, are considered the most important discoveries which she has made since she began digging in the buried city of Gournia in 1901. Both styles of pottery, according to Miss Boyd, undoubtedly belong to the three epochs of the city, which reach back to the third millenium before Christ. Beyond being able to give them a relative position in point of time, archæologists possess no knowledge concerning them.



TRAY FOR WASH BOWL AND PITCHER—AUSTIN ROSSER. (Page 172.)

Miss Boyd calls one of the pieces *Vasilica* and says it is unique. The coloring is a mottled lustrous black and red and the motives are evidently taken from the stories of Libya and Troy. The other is a hitherto unknown style of geometric pottery, painted white on black. These finds are the more important, as pottery is the archæologists' chief guide in Aegean excavations. In Cretan researches seven epochs have been established by different styles of pottery, covering a period of 1,000 to 1,500 years from about 2,500 to 1,300 years before Christ.

There are no traditions in Crete of this buried city. The work of excavating was resumed last year, when a small acropolis, a small palace and other buildings were uncovered, all belonging to one period, about 1,600 years before Christ.

Under a permit from the Minister of Education of the Cretan government the work of excavation this year was conducted twelve weeks, as against ten weeks devoted to this work in 1901 and 1903 respectively. About one hundred Cretans were employed under a Greek overseer from Delphi. A village site belonging to the third millenium was discovered about two miles west of Gournia, which is situated on the Isthmus of Hierapetra at the eastern end of the island. In Gournia twelve tombs were discovered in soft limestone rock shelters or hollow caves. Some of the tombs belong to the very earliest periods and some to the most recent or true Mæcanean age, while one or two of them belonging to the middle period were "house tombs" filled with bones.

On the walls of these latter tombs faint traces of fresco work were discernible. Among the important finds in the tombs were what are said to be two of the most perfect skulls yet unearthed in Aegean excavations. One belongs to the third millenium and the other to the Mæcanean period. They are so well preserved that the craniologists of the University of Pennsylvania hope to determine whether they belong to different races or to one prehistoric race that may have in-



DETAIL DRAWING OF GOURD—MARGARET OVERBECK

habited the island for thousands of years. Almost at the last moment before stopping excavations the workmen uncovered five rooms and a large vestibule of a house that was possibly a small palace of the late Mæcanean period.

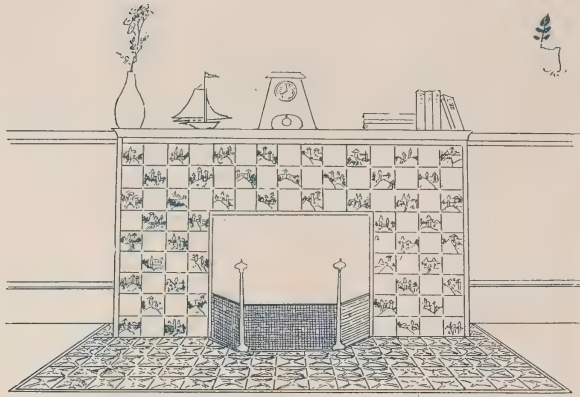
In addition to the vast amount of pottery, Miss Boyd has brought back with her quantities of seal stones, stone vases, bronze tools and weapons and numerous other articles as well as a full set of casts of the 1,400 or more seal stones in the museum at Candia, and also casts of the more important of her finds which she has left behind in Crete. The collection represents nearly one and a half tons of material.—*Philadelphia Ledger*.



DETAIL DRAWING OF GOURD—MARGARET OVERBECK



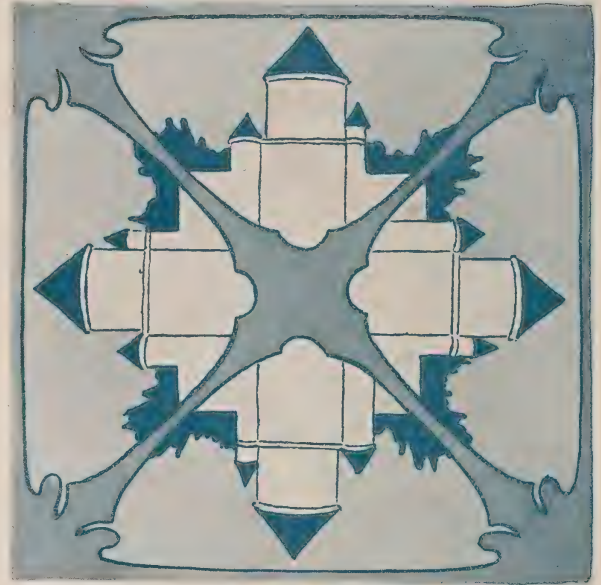
GOURD STUDY—MARGARET OVERBECK



FIREPLACE AND HEARTH (Second Prize)

Edith Alma Ross

THIS design can be carried out in any color scheme to suit the room in which it is to be placed. Delft blue in two or three shades for a blue room, a harmony of yellows and browns with perhaps a touch of red in roofs for a yellow room. For a pink room a combination of greys and browns with a little grey green would be harmonious. For a red room the effect would be best carried out in grey green, brown and red. For a green room, either a symphony in green or a combination of green and dull dark blue would be satisfactory.



TILE FOR HEARTH, REPEATED—EDITH ALMA ROSS



CHILD'S SET—SABELLA RANDOLPH

Tint Ivory Yellow and fire. Paint the edge and grass border in a dull greenish blue made of Royal Green, Banding Blue and Black. Paint the rabbits and inside line a medium tone of Brown Four. Black outline. (Plate shown on page 176)



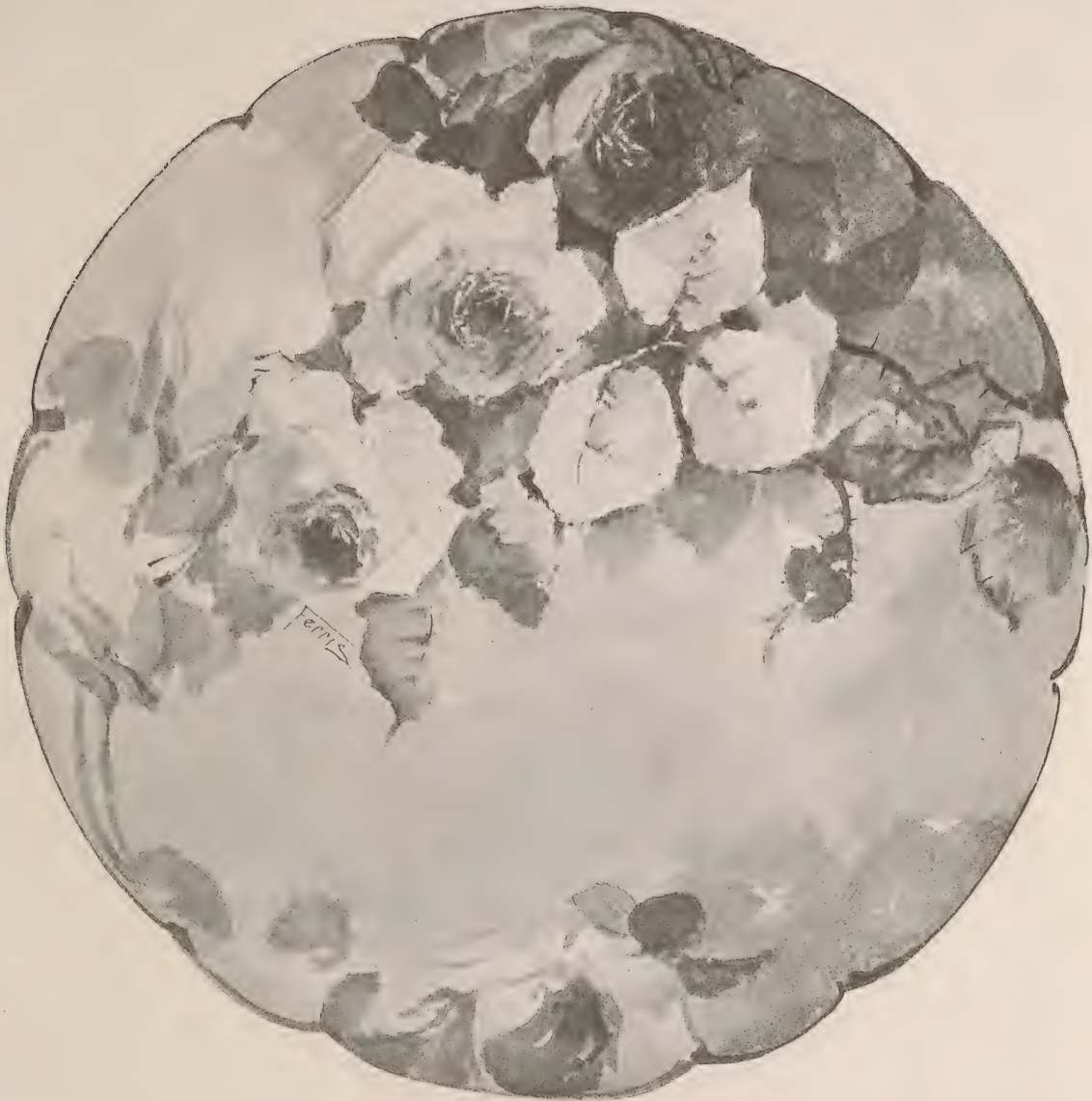
TILES FOR MANTELPIECE IN CHILD'S ROOM—SECOND PRIZE—EDITH ALMA ROSS



CHILD'S BREAD AND MILK SET—CHAS. BABCOCK

DARK back of cat's head, deep dull blue; lighter middle tone between narrow lines in design, light blue grey tone; open space between figures, greyish green tone, very light; middle dark band at top dull purplish blue; dark spots same as

color back of cat's head; outline in dark blue. Leave cat's head and balance of china white or tint very light cream color. The bands of both plate and bowl may be either in black or gold, or carry out in blue and white.



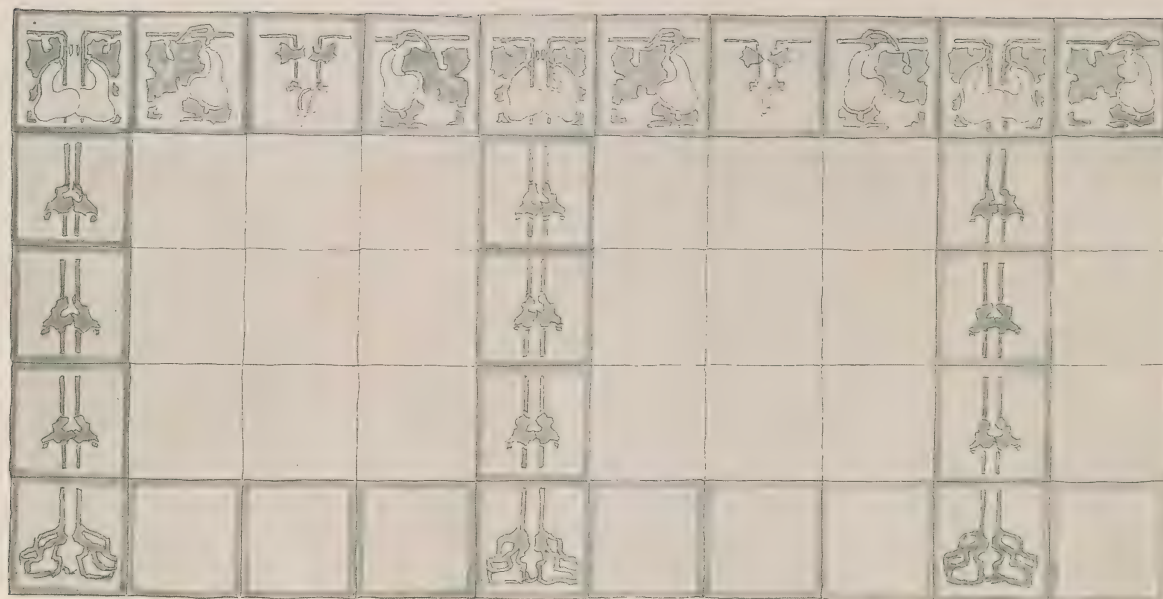
ROSES—J. M. FERRIS

THE light roses are pink with one ruby rose at the top. Paint pink roses with Peach Blossom with touches of American Beauty in heart of rose. For red one use American Beauty in light part and Ruby in the rest. Shade pink roses with Peach Blossom and Ashes of Roses in second fire and shade red rose with Ruby and Purple Black.

Do light bunch of leaves in Apple Green keeping them

very light and shade lightly with Moss Green and a little Peach Blossom in some places. Darker leaves in brown Green and Dark Green, background Celestial Turquoise in lightest places with shadings of Ivory, Moss Green, Royal Green and Dark Green.

Strengthen with same colors in second fire. Shade pink roses near calyx with Albert Yellow and Grey for white roses.



DADO FOR A CHILD'S ROOM—GOURD MOTIF—FIRST PRIZE—MARGARET OVERBECK

Tint the tiles a cream tone and fire. Vines in a grey green; gourds a dull buff; outline in a darker green for vines and in a reddish brown for the gourds.



CHILD'S SET—SECOND PRIZE—SABELLA RANDOLPH

Tint ground ivory with a touch of black, and fire. Carry out design in two tones of brown green with a touch of royal green—put a touch of dull red on combs and feet of chickens.



THE CRAFTS

WOOD CARVING AND PYROGRAPHY. LEATHER AND METAL. BASKETRY, ETC.

Under the management of Miss Emily Peacock, 262 Ryerson St., Brooklyn, N. Y. All inquiries in regard to the various Crafts are to be sent to the above address, but will be answered in the magazine under this head.

All questions must be received before the 10th day of month preceding issue and will be answered under "Answers to Inquiries" only. Please do not send stamped envelope for reply. The editors will answer questions only in these columns.

MAKING A STAINED GLASS WINDOW

Henry L. Parkhurst

CONTINUED.

After all the leads and glass are in place, solder all the joints on one side first, and then turn the piece over and do the other side. When turning the piece over, remove the slats at one end and at the near side, and slip the piece out half way over the edge of the table. Then turn it right up on edge grasping it in the middle or at the ends, turn it over holding it upright, and slip it back on the table. Be careful in handling a piece of leaded glass, never to take it up flatwise, for it will be found to be like a piece of paper, limp and easily broken. Leaded glass is never strong until it has been set in place for some time and the cement or putty allowed to harden, and the lead to stiffen.

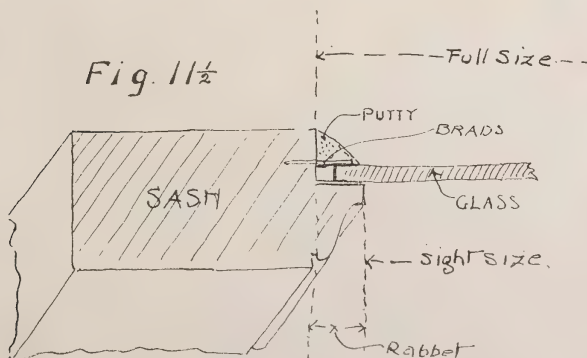
Before soldering the joints, rub them over with resin or candle grease. Care should be taken when applying the solder to put on only enough to hold the joint together firmly and to have the appearance of a well soldered joint. But do not make the spot of solder large and prominent unless you wish it. And then do it only when you wish to give a broad effect of drawing to the design. You should also see that the spot of solder is felt smooth on the surface. And to do this, hold the iron flat against the joint for an instant, and then drag it off in the direction of the length of the lead.

When the soldering is all completed, the window is ready for cementing or puttying. The cement or putty can be made of white lead loosened up and made thin with boiled linseed oil and whitening, and should be mixed up in a quantity in a pail. In applying it, take up about a handful or two on the end of the cement brush, and spread it over the glass pretty much as if you were scrubbing a floor. In rubbing it against the flanges of the leads the brush will push the cement under them. Do this on both sides of the window, and when you have gone over both surfaces, sprinkle a little dry whitening to clean off the surplus oil and putty, and rub off with a rag. When this is done, lay the window flat on a shelf, or stand it up against the wall or some boards, with something against it in front to keep it in shape.

After the cement has hardened, the window can be placed in its sash. Use small triangular glass fasteners or brads (Fig. 11½) to keep it in place firmly, and finish with putty in



Design for window in stained glass.



the rabbet. If the window is large enough for bars, their positions should be located before the glass is placed in the sash. Where they cross the glass, place one or more copper wires soldered to the leads, and left with the ends two or three inches long loose. The ends of the rods are to be embedded in the inside edge of the sash, and to do this, bore holes for them with the carpenter's bit and auger. One hole should be deeper than the opposite one, so that the rod when slipped into it can pass the edge of the sash on the opposite side, and slip into its hole. When the rods are in place put in the glass, and turn

the ends of the copper wires over the rods and twist them together once or twice. All these latter portions of the work of making a window, the cementing and placing in the sash, etc., relate only to the practical setting of the window and doing it substantially. The portions concerning its artistic production, are the cutting of the glass and the leading. And it is here where you will have to give most of your time and study.

The beginner will find many difficulties to overcome, and his patience will be sorely tried in cutting the glass closely to the patterns without breaking it. And it often happens that the only piece of colored glass that is satisfactory, will break when nearly all cut. This naturally suggests, I think, that a great deal of skill must be acquired in order to cut the glass successfully, and such is the case. For if you are naturally clever at handling tools, and there is little else to be done to make you skilful, you will still require a great deal of practice if only to develop enough muscle in your fingers to hold the glass and pattern firmly, and prevent them slipping out of place.

Before taking up any ornamental work in leaded glass, it would be advisable for the beginner to try a few simple geometrical patterns (Fig. 12), the simplest being the diamond and the square. Then try the octagon and the hexagon, and after that try one of these patterns with a small spot of orna-

ment in the centre or near the top. And remember that in leaded glass as in every other branch of industrial art, simple work can be made very attractive and artistic.

GLASS PAINTING.

Glass painting is a branch of stained glass art almost entirely separated from every other part. It forms the principal part of making some windows, while with others it is merely supplemental to the original coloring of the glass and the leading. And it is as a supplementary branch that I will add a few words regarding it.

You will often find that painting will add easily to some part of the drawing or tinting. And if so wait until all your glass is cut, and then decide how much painting is to be done and where. It will be of great help. The principle of its process is very much the same as china painting. That is, you use mineral colors with a medium that will evaporate under fire in a kiln, such as turpentine, tar oil, oil of lavender. The colors come dry, and should be mixed with whatever medium you select and a very little Venetian turpentine, to make the color stick well to the glass. The oil mediums keep the color more tacky on the glass than turpentine which evaporates quickly and leaves the color dry and flakey. The preference for one or the other depends upon your success in handling it, entirely. One person will handle one medium readily that another cannot handle at all. If lines are to be painted, apply the color with a long hair sable or camel's hair brush. If shading is to be done the color can be painted on in a mat, and etched out with a point of a needle after it is dry, or shaded with bristle brushes. The colors most commonly used are sepia, for lines and shading, flesh red, dark green, canary yellow, and best blue for other work. The reds and sepias burn off in the kiln more than the other colors. The yellow burns on fairly well, and the green still more and the blue most of all. Some times the colors burn off so much that frequent paintings and firings are necessary to get the result desired.

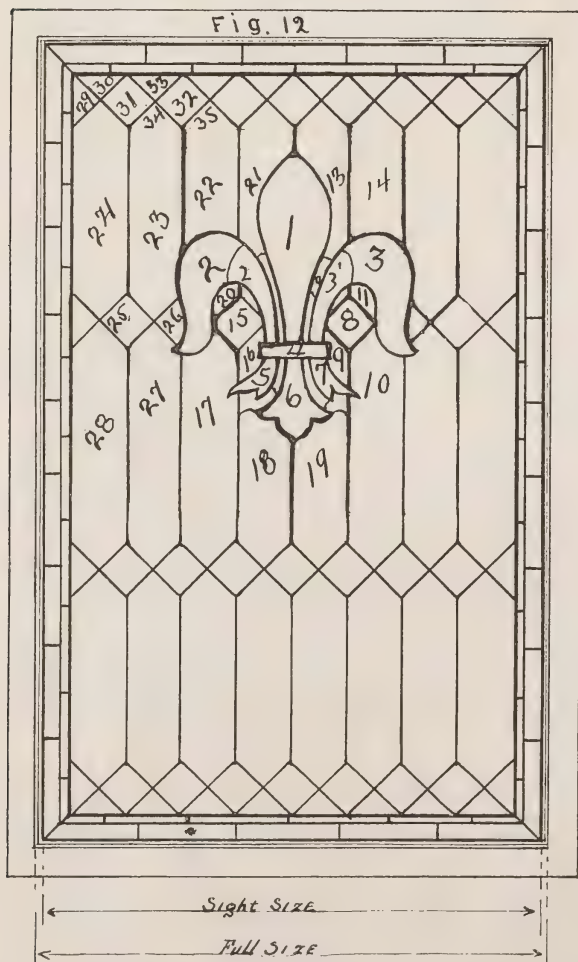
The use of painting in connection with leaded glass as considered in this article, would be as before stated a supplementary thing; and would be of service only in ornamental work where some details could be carried a little further in their development than leading would permit.

CHILDRENS' DRINKING CUPS

THERE would seem to be no end to the variety in design both in shape and decoration, for silver drinking cups for little children, yet how few good ones the buyer has to select from. Simple shapes, with simple practical handles and appropriate decoration, does not seem a great deal to ask, but we travel from one silversmith to another and search in vain for something that would seem just right.

The two cups illustrated are attractive because of their simplicity; etching designs in the silver seem so appropriate as a means of decoration because of its apparent simplicity, though in reality, like all work that ends well, great care must be exercised during every stage of the process from the time the design is thought out until the resist is taken off. Careful study of the etching done by the Japanese should greatly help enthusiastic workers in this craft for they are surely masters.

The cup designed and executed by Ellen Parker Day, was made from the materials given below. The strip for the body part of the cup was measured and cut perfectly true, and the ends well soldered together in a lapped seam. The lower part was beaten on the anvil until it was the desired shape. After the design was put on with the steel point and the cylinder filled with cement, the boat and the name in the border were



SKETCH SHOWING PATTERNS NUMBERED

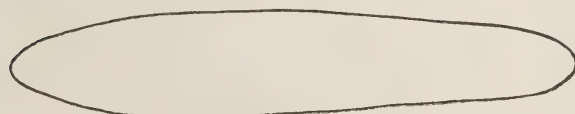
chased on with appropriate tools; the chasing completed, the cement was heated and taken out, and the cylinder placed on the square of silver; these two were bound together with binding wire and fitted so well that light could not come through at any point. The seam in the body of the cup already soldered was well covered with a mixture of red clay and water, or rouge and water and dried. It would be well to use solder a grade softer for the bottom of the cup, there would be less danger of



Ellen Parker Day.

the first solder melting. When the flux and solder was applied round the bottom seam, the cup was placed on a flat piece of charcoal and the flux dried. The cup was gradually heated until the solder ran smoothly all around the joint. After the two pieces were perfectly joined together, the superfluous silver was cut off and the edge filed. The seams were covered again with red clay (excepting where the handle was to be), the handle made and soldered on.

The cup was well polished inside, the outside oxidized with a hot solution of liver of sulphur, and the surface rubbed gently with a little oil on a chamois skin leaving the deep places dark, so giving character to the design.



illus No 3.

Illustration No. 2 was executed and designed by Emily F. Peacock. This cup was made in the same way as illustration No. 1, excepting that the shape was only a trifle larger at the bottom, and was made so by leaving the silver about one sixteenth of an inch larger each side at the bottom of the body part of the cup. The handle (illus. No. 3) was cut out with a saw, shaped on the wood block and lined with the piece of fine silver. When the cup was put together, the border of geese (adapted from a design by Mrs. A. Alsop-Robineau) was put on with the steel point, also the name in the band at the bottom of the cup. The resist was painted on the design in the upper band and some distance up the inside of the cup. When dry this part was put in the acid solution long enough to etch the background behind the trees slightly. Take the cup out of the solution and paint the resist over the etched background, when that is dry, etch the background behind the geese a little longer and cover them, etch the background behind the waves deeper still, getting in this way three different depths, and an interesting effect. The name in the band at the bottom of the cup was etched about the same depth as the trees. Finish in the same way as illustration No. 1.

TOOLS

Solder, flux and blow-pipe, anvil, hammers, chasing tools, steel point, chasing ball, cement, charcoal and binding wire,

a perfect cube of hard wood that just fits the cylinder of silver to true it up on, a wood pattern block for the shaping of the handle. Nitric acid solution, glass or porcelain dish for the solution, red clay and brushes.

MATERIALS FOR ILLUS. NO. 1

A strip of silver 20 gauge, $3\frac{1}{2} \times 9\frac{1}{4}$ for the body of the cup. A square of silver 20 gauge, $3\frac{1}{2} \times 3\frac{1}{2}$ for the bottom of the cup. A strip of silver 12 gauge, 1×5 for the handle and a strip of pure silver 24 gauge, 1×4 to line the inside of the handle.

MATERIALS FOR ILLUS. NO. 2

A strip of silver 20 gauge, $3\frac{3}{8} \times 9$, a square of silver 20 gauge, 3×3 , a strip of silver, 12 gauge, 1×6 and a strip of pure silver 24 gauge.



ANSWERS TO INQUIRIES

E. Houran—The price of tools for leather work depends on what kind of leather work. If you are a beginner modeling is the simplest method. For that you will need two modelers, each having a tool on both ends. One tool is sharp and three cornered, called a liner, the others are thumb shaped of various sizes, these are used for modeling. The two modelers and knife for cutting cost about \$1.25; these and the leather can be bought at the Karol Shop, 22 East 16th Street, New York. Besides you need a piece of marble or glass about 8×12 , a T square, triangle and sponge.

D. W.—A lapped seam, is almost a double seam. One side of the metal is beveled on the top and the other side is beveled underneath, so that the two fit together without extra thickness. It is stronger than the seam where the straight edges meet.

K. W. R.—The following is said to be a good composition for soft solder, providing the materials are as pure as it is possible to obtain:

Pure grain tin 2 parts,
Pure lead 1 part.

In melting this composition great care must be taken not to overheat it. The lead which has a higher fusing point than tin should be melted first. Heat the tin in another vessel, mix the two together and stir gently. The mixture should not be poured from the ladle, until it begins to cool. Put a piece of paper into the heated mass, if the paper does not ignite, the mixture is ready to pour.

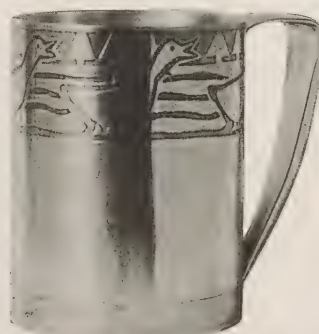
Mrs. S. A. Green—Wrought iron nails can be bought at Patterson Bro., 24 Park Row, New York. They also keep sheet copper and brass, this should be ordered by gauge.

E. P.—Send all particulars in reference to your monograms to Miss Mary H. Peckham, 150 Halsey Street, Brooklyn.

A. M. Shoemaker—Gilders size is applied to the wood before the gold leaf is put on. If the gold is to be burnished, a preparation of chalk and filler must be put on the wood before the size so that all pores in the wood are filled up. Both these preparations are sold ready to use. Apply a thin coat of shellac to the leather and before it is dry put on the gold leaf. Burnish both leather and wood with an agate burnisher.

Mrs. E. D. G.—You will find an interesting chapter on basketry in the "Art Crafts for Beginners," just out by Frank G. Sanford.

H. H. Irving—If the leather you want to color is ooze, use water colors. If it is smooth calf use Diamond Dyes. Sometimes a skin is very oily, then you would have to use a thin coat of oil color.



Emily F. Peacock.

CRAFTS NOTES

Art Crafts for beginners by Frank H. Sanford, has just been published by the Century Co. It is a very comprehensive practical work, and will be a valuable assistant to the student and teacher, for it fills a great need in the crafts world.



ANSWERS TO CORRESPONDENTS.

This column is only for subscribers whose names appear upon our list. Please do not send stamped envelopes for reply. The editors can answer questions only in this column.

All questions to be answered in the Magazine must be received before the 10th day of the month preceding issue.

Miss G. H.—The dull finish black of which you speak, is the "Mat black." It is dusted on the same as any grounding color. There is also a black lustre that gives a metallic effect.

Mrs. G. M. K.—In painting dark grapes the ruby is generally used pure and a touch of black added afterward as a note of emphasis. The same method is used in painting blackberries. First model lightly with the blue so that you get a pale wash of blue in the high lights, then shade with ruby and finally an emphasizing touch of black is added.

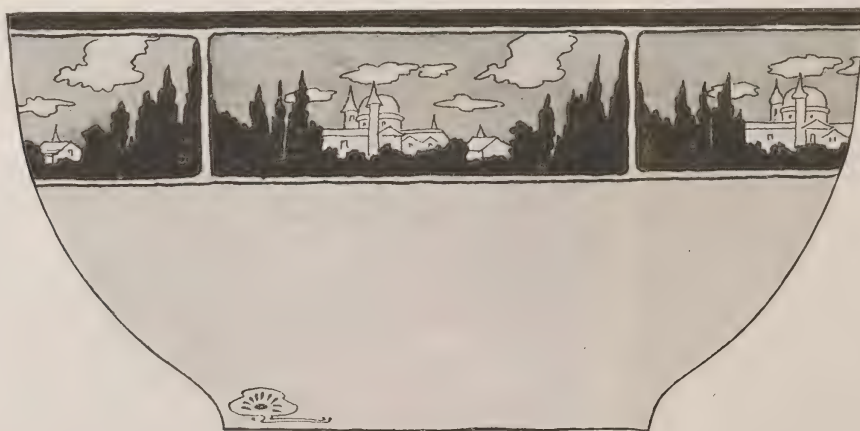
Mrs. T. J. McC.—The paste for jewels is mixed with fat oil of turpentine to form a stiff paste, just enough oil to hold the powder together, then add oil of lavender until of about the consistency of tube color. Make a tiny dot where you wish the jewel to set, then press the jewel firmly down upon it. A setting of raised paste for gold can be made around it and gilded when thoroughly dry. The enamel jewels are made in two ways. The tube Aufsetzweis can be colored with about $\frac{1}{2}$ to $\frac{3}{4}$ color, or darker if desired, but the lighter tints need an addition of about $\frac{1}{3}$ flux to the Aufsetzweis. Thin with oil of

lavender and breath upon it several times till it stays "put" when a dot is made and does not spread. When the powder enamel is used, the powder is mixed with fat oil just enough to hold it together, add color if not already colored about $\frac{1}{5}$, then thin with oil of lavender, breathing upon it to make it thicken up and stay in place. When you breathe upon it, turn it over with the palette knife rather than stir it around—a horn palette knife is preferable. We have, at present, no study of lemon or orange blossoms, but hope to get them later. We do not know where they are obtainable.

Mrs. A. T. A.—In making a conventional border with outlines, several different methods are used. When a lustre treatment is used it is safer to draw the outlines lightly in black and fire first, then fill in the various spaces with lustre, if a second covering of lustre is needed in third fire, then when the lustre is dry and cleaned off where it runs over the edges of the design, go over the outlines again firmly with black thinned with turpentine, but be careful not to use too much turpentine or it will run and the lustre will be spotty. When one is skilful enough this can all be done in one fire. The outline being first drawn lightly in India ink, and after the lustre is laid, the outline can be put on with color, but it is much safer for a beginner to fire the outline first. Where a mineral treatment is desired, the outline is drawn in India ink, always lightly. If a perfectly flat tint is desired, the color is then tinted where wished and wiped off from the other parts or if a dark tone is wished, grounding oil is used in the dark places, and the color dusted on, the india ink will not be disturbed by wiping with turpentine. Then when the design is all laid in with color, the outline can be painted on, or the color can be fired first and the outline put on after the retouching is done in second fire. Gold outlines are always put on after every thing is fired, unless one is very expert. Where flat enamels are used they are floated in with a full brush and the outlines can be put around them at the same time or in a later fire.

M. J.—To use India ink sticks put a little water in a saucer and rub one end of the stick in it until sufficiently black, then use with a brush or pen as desired.

W. R. O.—We thank you for your interesting letter. We receive a good many complaints that we do not give enough naturalistic work, but few are written in such pleasant terms as yours, and few people who thus complain seem to appreciate our efforts to bring a better standard of ceramic decoration in this country. There is much truth in what you say, and it is certain that a bad conventional decoration is not a bit interesting, and many designs we have published are deserving a good deal of criticism. But the fact remains that naturalistic painting is not decorating, and that there is no earthly reason why a flower, however pretty and attractive in nature, should be reproduced in its natural colors and details on a vase for instance. If you do that, you forget that the vase itself must be the decorative object and that the decoration on the vase is simply to give spots of color to it and bring out its beauties of shape. If you give too much importance to the flower, it kills the vase, you have used the vase as a medium for flower painting instead of using the flower to decorate the vase. If you are so fascinated by a flower that you wish to paint it as it is, paint it on canvas in oil, on paper in water color, or if you prefer to use china, on a panel which is of no importance and interest in itself and simply replaces the canvas or paper of the oil and water color paintings.



BOWL—EDITH ALMA ROSS

Sky a warm grey; trees and outlines gold; clouds, white; buildings, light brown.

KEEP THE FIRE ALIVE

KERAMIC STUDIO

CONTRIBUTIONS

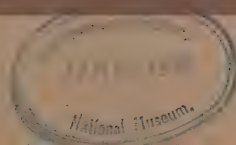
MRS. K. E. CHERRY ♪ ♪ ♪ ♪ ♪
MR. RUSSELL GOODWIN ♪ ♪ ♪ ♪ ♪
MISS CLARA HASTINGS ♪ ♪ ♪ ♪ ♪
MRS. TEANA McLENNON-HINMAN ♪
MR. W. P. JERVIS ♪ ♪ ♪ ♪ ♪
MISS MARY OVERBECK ♪ ♪ ♪ ♪ ♪
MRS. HENRIETTA BARCLAY PAIST
MISS G. POMEROY ♪ ♪ ♪ ♪ ♪
MISS EDITH A. ROSS ♪ ♪ ♪ ♪ ♪
MR. F. H. RHEAD ♪ ♪ ♪ ♪ ♪
MISS AUSTIN ROSSER ♪ ♪ ♪ ♪ ♪
MISS YVETTE STORK ♪ ♪ ♪ ♪ ♪
MRS. SARA WOOD SAFFORD ♪ ♪ ♪ ♪ ♪
MISS MARY THOMAS ♪ ♪ ♪ ♪ ♪
MRS. BELLE BARNETT VESEY ♪ ♪ ♪ ♪ ♪
MR. & MRS. WEBB ♪ ♪ ♪ ♪ ♪

JAN. MCMV

Price 35c.

Yearly Subscription \$3.50

A MONTHLY MAGAZINE FOR THE POTTER AND DECORATOR.



CONTENTS FOR JANUARY 1905

	PAGE
Editorial	189
Brush Work, Continued	189-190
Treatment for Poppies (Supplement)	191
Washbowl and Pitcher	191
Washstand Top in Tiles	192
Louisiana Purchase Exposition "Ceramics"	193-194
Chrysanthemum	195
Quotations with Gifts	196
Studies of Hemlock	196-197
Paste for Raised Gold	197
Hydrangea	198
Hazel Nuts	199
Rose Design for Teapot Stand	200
League Notes	200
Coffee Set	201
Plate Borders	202
Shooting Star Design for Salad Bowl	203
Tiles and Window Box	204
Morning Glory Studies	204
Studio Notes	204
Lantanna	205
The Crafts—Bead Work	206-209
Leather Work	209-210
Answers to Correspondents	211

Some Leading Agencies of Ceramic Studio

We take pleasure in mentioning a few of the leading agencies for the sale of the KERAMIC STUDIO, where, also, subscriptions may be placed:

Boston, Mass.—Miss E. E. Page, 286 Boylston St.; Smith & McCance, Old Corner Book Store.
 Brooklyn—A. D. Mathews & Sons, Fulton Street.
 Buffalo—Mrs. Filkins, 609 Main Street.
 Chicago—A. C. McClurg & Co., Brentano's; Burley & Co.
 Cincinnati—Miss M. Owen, 245 Elm Street; A. B. Closson, 4th Street near Race; Traxel & Mass, 4th Street, near Elm.
 Cleveland, Ohio—Vinson & Korner, 150 Euclid Ave.
 Columbus, Ohio—Lee Roessler, 116 So. High Street.
 Dayton, Ohio—W. W. Kile & Co.
 Denver, Colo.—E. Meininger, 807 16th Street.
 Detroit, Mich.—L. B. King & Co.
 Hartford, Ct.—E. M. Sill.
 Grand Rapids, Mich.—Miller, Wolfe Co.
 Indianapolis, Ind.—Keramic Supply Co., Lemeke Building.
 Kansas City, Mo.—Emery, Bird, Thayer Co., Geo. B. Peck Co.
 Louisville—Louisville Book Store.
 Minneapolis, Minn.—Minn. Art China Co., 607 1st Ave. So.

New York City—Brentano's, Union Square; M. T. Wynne's, 11 E. 20th St.; The Fry Art Co., 36 W. 24th St.; Wanamaker's; American News Co. J. B. Ketcham, 107 W. 25th Street; M. J. Whaley, 430 5th Ave.
 Newark, N. J.—Keramic Novelty Co.
 Oakland, Cal.—Smith Bros.
 Omaha, Neb.—Megenth Stationery Co.
 Philadelphia—Wanamaker's.
 Pittsburgh, Pa.—Otto Schaffer & Bros.; Kurtz, Langbein & Schwartz; R. S. Davis & Co., 346 Fifth Ave.; John G. Yergan, 36 Fifth Street.
 Reading, Pa.—Rowland's Book Store.
 Saratoga Springs—Robson & Adee.
 San Francisco—Mrs. M. E. Perley, 207 Post Street.
 Sioux City, Ia.—J. K. Prugh, 312 Nebraska Street.
 St. Louis—F. Weber & Co.; A. S. Aloe & Co.
 Syracuse—Wolcott Book Shop; Welch & Hollingsworth; W. Y. Foote; A. L. Varney & Co., 336 S. Salina Street.
 Tacoma, Wash.—Art Exchange, Mrs. Mead.
 Toronto—The Art Metropole.
 Warren, Pa.—Alzora Bashline.
 Washington, D. C.—Woodward & Lothrop.
 The Magazine may also be ordered from any news dealer or book store in this country, who can procure it through the American News Company, New York, or its branches.

KERAMIC STUDIO

Vol. VI, No. 9

SYRACUSE, NEW YORK

January 1905



WE begin in this issue the series of articles on Potteries and Porcelains at the Louisiana Purchase Exposition starting with Rookwood which with its two Grand Prix stands at the head of the list of art potteries in the United States. Grueby also received a Grand Prix and there were other awards which we will give later, but the potteries which will be mentioned after Rookwood will not be in the order of their importance but as the illustrations and other data can be prepared for publication. Many of the small individual exhibits in the Art Palace, too small for an award at the exposition, yet give promise of more interest and importance in an artistic way than many other large ones, which received the attention of the jury in the buildings of Varied Industries and Manufactures.

✦

KERAMIC STUDIO issued a very attractive poster for the Christmas number, the design being given reduced on the cover of the December issue. This was printed in four colors, buff, light brown, dull red and olive green after a color scheme by Mrs. Marie Crilley Wilson, the design being a combination of the first prize design of child's set by the same artist and the second prize design by Miss Austin Rosser. We have had so many inquiries for these posters that we have had an extra number printed which will be mailed to any subscriber on the receipt of ten cents.

✦

Mr. Edwin A. Barber, the Curator of the Pennsylvania Museum, has just issued a book of "Marks of American Potters," which will be invaluable to collectors and to all people interested in the history of American pottery. The book is the result of long researches and study, and very thorough, as will be expected by people who are familiar with Mr. Barber's former publications. The history and development of the manufacture of industrial as well as art wares in the United States is followed, in the different sections of the country, up to the present time and the faithful reproductions of all marks used by different potteries will allow collectors to classify their specimens, and to determine at a glance the time of their production.

✦

Subject for monthly competition ending Jan. 15, 1905—The Cicada (see November KERAMIC STUDIO).

Subject for monthly competition ending Feb. 15, 1905—Naturalistic Study (see December KERAMIC STUDIO).

Subject for monthly competition ending Mch. 15, 1905—Convolvulus or Morning Glory. Decorative treatment for water pitcher. First prize, \$6.00 Second prize, \$4.00

✦

The plate design by Miss Mary Overbeck in the Christmas KERAMIC STUDIO was ascribed by mistake to Miss Margaret Overbeck.

✦

We hope to be able to publish the pottery and porcelain awards at the St. Louis Exposition in the February number of KERAMIC STUDIO.

A Handbook of Plant Forms, by Ernest E. Clark. John Lane, Publisher.

John Lane publishes a volume of interest to art students in Ernest E. Clark's "Handbook of Plant-Forms." The book contains 100 full page plates comprising nearly 800 illustrations. An introductory study is furnished of leaf forms, with an explanation of the accepted names. The author has refrained from supplementing the plant drawings with decorative designs based upon them, in the belief that no check should be put by such suggestions upon the originality of the student. An introduction discusses the treatment and conventionalization of form. The author recommends careful examination and study from nature of any plants chosen for treatment, so thorough that at any given time no difficulty would be experienced in making a drawing from memory. The book supplies a help in directing students of design toward the proper conventionalizing of plant forms, and away from the odium of mere naturalistic treatment. The author is Art Master of the Derby Technical College, and National Silver Medallist in ornament and design. The KERAMIC STUDIO can thoroughly recommend these drawings of flowers not only to the student of design but to the naturalistic painter.

✦

We very much regret that by an oversight we omitted to give Mrs. L. Vance-Phillips credit for the introduction of the flesh palette formula given in the treatment of the figure study "Dawn" by Harriette B. Strafer, published in our October 1904 number. When this formula was first published in June 1899 KERAMIC STUDIO, it was stated that it was Mrs. Vance-Phillips' formula, and we take this opportunity of correcting the omission in our October number, as Mrs. Vance-Phillips is entitled to all credit for originating the formula.

✦ ✦

BRUSH WORK

W. P. Jervis and F. H. Rhead

LESSON 6—HINTS ON SKETCHING BIRDS

THESE drawings may be made on tinted paper and the form of the bird painted in its natural color and then outlined as shown, or if as Figs. 9 and 10, follow the masses and paint in natural colors. Fig. 3, 4 and 10, give a good idea of how the Japanese express form in a few strokes, as also do 1, 6 and 7 for quick sketching. Fig. 10 would make a good border if repeated at certain intervals and a frog might be used in place of the chick. Here is a suggestion for a color scheme: Let the background be a warm and rich sage green, the goose in white with blue head and orange beak and feet, outlined as shown in dark grey or black. The frog should be brown with conventional grass at the back treated very simply.

The bird panel is suitable for either pyrography or pottery. For underglaze pottery treatment, make the sky behind the clouds a pale yellow, leaving the sun and rays white. The clouds should be a pale heliotrope inclined to warm grey, which can be obtained by adding about one seventh yellow to the heliotrope or "unique." The poplars are a warm olive and the other trees sage green. The bird in a dark cold green with red circle on head and orange beak and legs.



TREATMENT FOR POPPIES (Supplement)

T. McLennon Hinman

THIS study is painted on a light tinted paper, and the paper should be considered much as the background would, were the same study done on white paper, as for instance, a greenish tint for red and yellow flowers; for blue or purple a tan shade; white or such flowers as require accept a cold greyish tint.

The poppies are done in three shades of red carmine, safflower and vermillion, for the shadow tone carmine and Van Dyke brown, for the light and half-tone safflower. These colors are used as a ground and no white is used until the study is covered. Then vermillion and white for the high light and safflower and white for the middle tone. When this is quite dry a very brilliant color may be obtained by using safflower clear as a wash over the whole flower.

The greens are made by using three colors and these three

colors will prove satisfactory for all greens, and all greens are most difficult to those who paint in a medium with which they are unfamiliar.

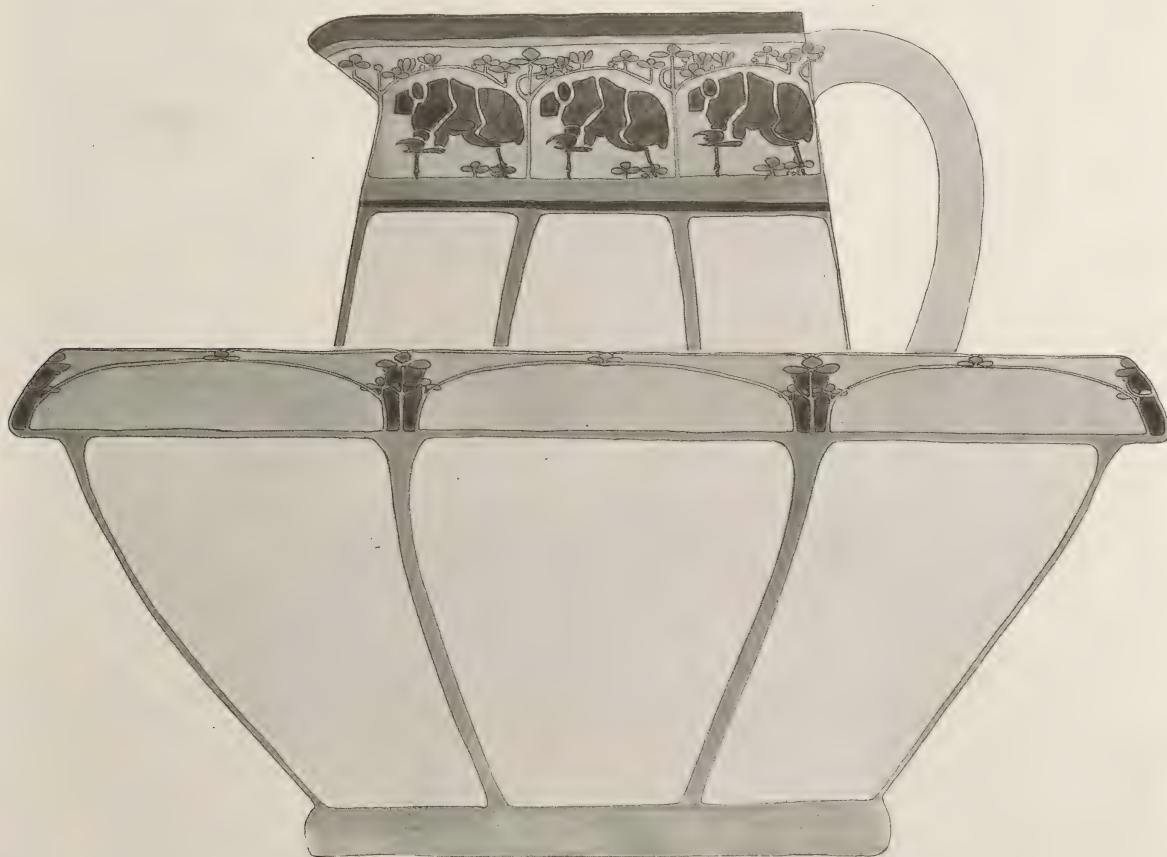
Indian yellow, Prussian blue and Payne's grey. These will give any shade desired for a middle or dark tone; for the lightest or a shade that is of a blueish cast, emerald green, lemon yellow and white. Van Dyke brown, carmine or burnt sienna may be used to vary the shade.

The same colors as the half tone for leaves may be used in a background for any flower.

The background for this study may be any color, yellow or blue, Payne's grey or Hooker's green, brown, pink, and burnt sienna with blue.

The brushes are eight and ten square shaders and the same numbers pointed shaders.

A more complete article on water color painting by Mrs. Hinman will appear in one of the coming issues.

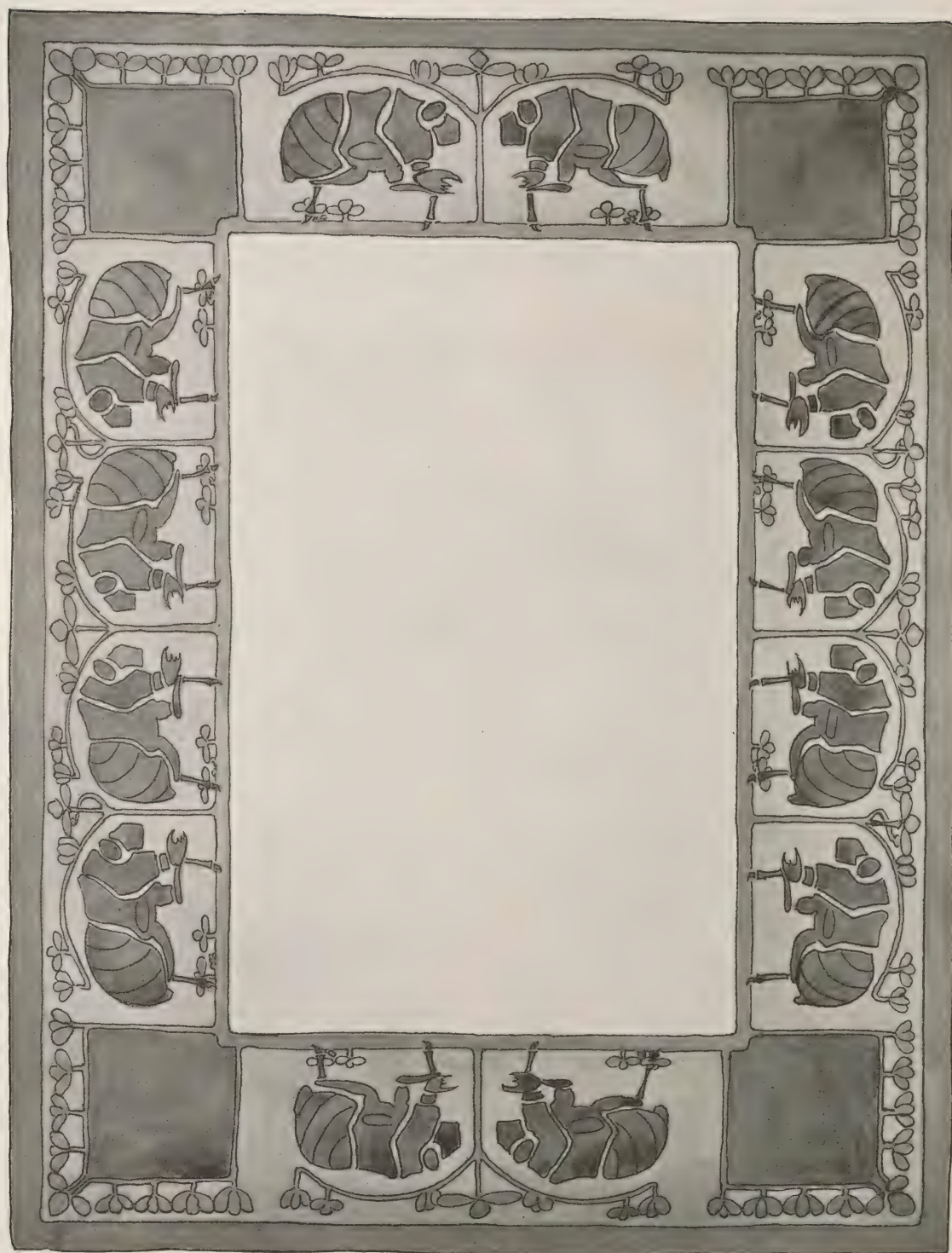


WASH-BOWL AND PITCHER—MARY OVERBECK

THIS set is to be executed in a harmony of yellows. First tint the set an ivory tone. The background of the border should be yellow lustre. The dark bands and locust shells

in yellow brown lustre over brown lustre. The Hydrangea blossoms and stems in yellow brown lustre.

Outline all in gold.



WASHSTAND TOP IN TILES—MARY OVERBECK



FIREPLACE AND MANTEL—ROOKWOOD

LOUISIANA PURCHASE EXPOSITION CERAMICS

ROOKWOOD POTTERY.

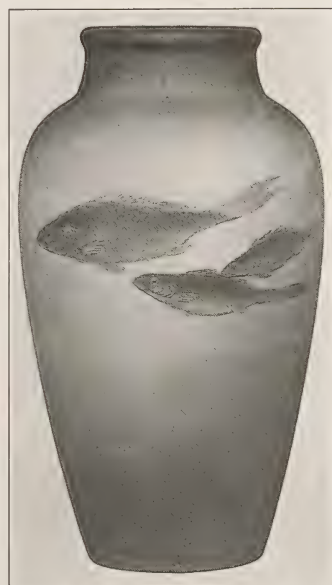
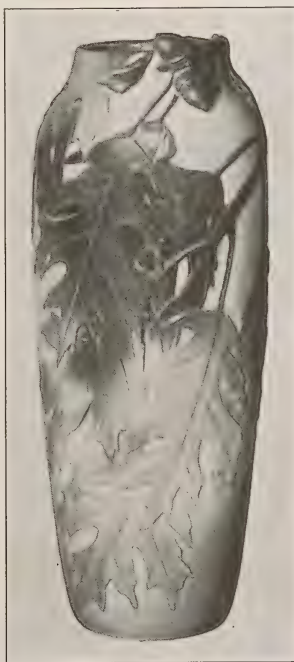
THE short intervening time between the Pan-American and the Louisiana Purchase Expositions has been sufficient to see spring into existence a flock of imitating potters like mushrooms after a rain. These are copying either Rookwood or Grueby, with more or less success but still these names of national renown remain preeminent and it will take something more than imitation to throw them into the shade.

Even this short space of three years has brought new developments in the art of Rookwood. Not only has their mat glaze, used in combinations with indianesque designs, been

improved in texture and applied most successfully to tile and other architectural effects, but a new mat glaze has been developed which admits of painting in underglaze on the biscuit. Through this mat glaze, called "vellum," the painting in all its exquisite details and subtle shades is seen as through a fine ground glass, the surface being absolutely without gloss. Technically it would seem that the mat glaze on pottery could develop no further. As Rookwood never stands still, we may then look for developments in unexpected quarters when next it appears before the public with a "tour de force." For ourselves, though we admire the technique of these mat effects, we regret that the real excellence of the work executed in the more brilliant glazes should rather be overshadowed by the prevailing "fad." In the Rookwood exhibit at the Exposition, a number of fine examples of these brilliant glazes still held the lead artistically, notably some pieces designed by E. T. Hurley, a large vase in an exquisite shade of yellow or rather yellow brown with a flock of geese in white, and another vase shaded from a cream tone to a grey blue with dark grey blue and olive toned fish. A vase in white dogwood blossom light yellow at the top and, back of the design, black shading to a soft toned blue, signed J. D. W., was also most successful, as well as a lamp in greens with bird decoration by the Japanese artist

Perhaps the most attractive work in the mat glazes combined with straight line or indianesque ornament, was from the designs of E. T. Hurley and H. D. Wilcox. A lamp in yellow browns with a variant of the greek fret design, by the latter artist, was particularly attractive.

Many of the Rookwood artists were represented in the Art Palace as well as in the regular exhibit in the Varied Industries building. Matt A. Daly, Edw. Diers, E. T. Hurley, Sturgis Lawrence, Laura Lindeman, Marianna Mitchell, Fred Rothenbusch, Sallie Toohey, Harriet E. Wilcox, were all honored by selections from their work by the jury. The work of Miss Toohey deserves special mention for the originality and bold-



VASES—ROOKWOOD POTTERY

ness of her design which is conventional in treatment and particularly well adapted to treatment in the mat glazes.

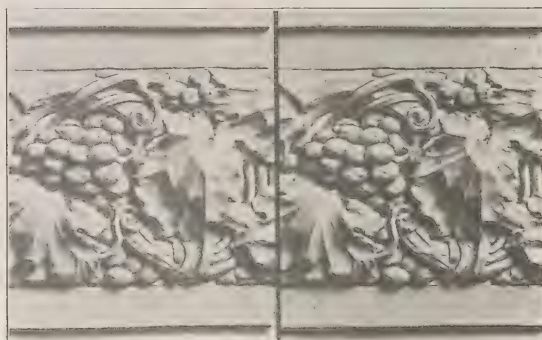
Many pilgrims from the Exposition stopped at Cincinnati on their return to see the work in its birth-place and the trip was perhaps more satisfying than the formal exhibit at St. Louis, for the personal always lends interest and in this case the surroundings are of unusual attraction. The pottery is perched on top of a high hill like a rook's nest on the tree top, so high indeed that the visitor returns again to the city's level by an elevator car descending an incline plane; as the city is hid from view by an intervening cloud of smoke and vapor, one feels somewhat like Dante descending into Inferno.



FIREPLACE AND MANTEL—ROOKWOOD FAIENCE

The quaint low buildings of Rookwood with their grey brown stucco and brown woodwork outlined against the sky and surrounded by clouds of smoke so that the city is seen always as through the mist, seem the very home of inspiration and the interior is as attractive as the exterior, apart from the works of art therein contained. By the courtesy of the manager, Mr. Taylor, the visitor is conducted through the pottery and shown the entire process of building the finished vase, from clay to glaze. There are no secrets here except in the laboratory. Here is the machinery for preparing the clays and glazes, here the wheel and moulds. Here are the rough sketches and the finished work, the large architectural pieces in process of construction as well as the cabinet pieces of less size but equal value. To the favored are shown the museum of pieces exchanged with other potters and potteries; the experiments in flambé red and crystalline glazes made as far back as 1900, pioneer work in this country, along which lines Rookwood has not cared to follow except in an experimental way and as a

sort of relaxation and amusement for the chemist, the natural development of the original line of Rookwood being sought rather than an extraneous effect which would necessitate an



MODELLED BORDER USED IN FIREPLACE—ROOKWOOD

entire departure from the present methods and a break in the logical sequence of Rookwood's artistic growth, the architectural work and artistic tiling being at present the natural and gratifying culmination of its efforts. For the present, at least, Rookwood leads the ceramic world in America.

[TO BE CONTINUED]

COLOR SCHEME OF CHRYSANTHEMUM

Sara W. S. Safford

A WHITE chrysanthemum against a grey green background is always a happy combination whether for a vase or tile. For a grey in this flower use violet and yellow deepened with dark green. The centre may be kept warm with yellow. For a yet more delicate grey in lightest flower, pearl grey with a touch of violet may be used.

If one desires to have a delicate pink or yellow chrysanthemum a thin wash of rose or yellow may be applied for the second firing and the sharp detail touches added in for third firing.

In nearly all cases the worker will arrive at happy results if he is careful to keep his lights and shadows in the first painting and then use the clean pure color in after paintings.

Use violet with cool greens in the "laying in." With the yellow chrysanthemums warm brown greens would be happy. Use pearl grey, violet and dark green in the background.

OLDER THAN THE CHINESE

WE often point to the Chinese as the oldest existing nation, but there is abundant evidence that the cliff dwellers of the southwestern United States are much older. The very name of the race has perished, but houses of this strange people have been found on the wildest and most inaccessible of mountain sides.

The pottery from these long wrecked homes suggests Egypt, as do the inscriptions found. Mummies, bodies wrapped in cloth and feathers from the breasts of turkeys have been dug from burial places among the cliffs, and there is a general resemblance to the oriental type.

There is good reason to believe that these people were blooded relatives to the inhabitants of the land where the Nile is god and that they antedated the pyramids.

If the human race did not start on this continent there is every reason to believe that it made its appearance here very early in the game.—*Boston Morning Globe*.



JANUARY, 1905
SUPPLEMENT TO
KERAMIC STUDIO

POPPIES—TEANA McLENNON-HINMAN

COPYRIGHT, 1905
KERAMIC STUDIO PUB. CO.
SYRACUSE, N. Y.



CHRYSANTHEMUM—SARA WOOD SAFFORD



SOME QUOTATIONS WITH GIFTS

With a *pocketbook*: "We must expect change"—*Dickens*.

A *cigar box*: "Our best remains are ashes"—*Horace's Odes*.

A *cigarette case*: "Swift as a shadow, short as any dream"—*Midsummer's Night Dream*.

A *tobacco jar*: "The man who smokes thinks like a Sage, and acts like a Samaritan"

A *tea cup and saucer*: "We'll tak a cup o kindness yet, for days of Auld Lang Syne"

A *Racquet case*: "You shall be welcome, Madam, to my Court"—*Henry V*.

A *shaving cup*: "Much ado about nothing"

A *tea urn*: "The bubbling and loud hissing urn, throws up a steamy column, and the cups that cheer, but not inebriate, wait on each"

A *salad bowl*: "Let onion atoms lurk within the bowl, and half suspected animate the whole"

or "The tender lettuce brings on softer sleep"

A *stein*: "Drink fayre, Don't swayre, Long live the king"

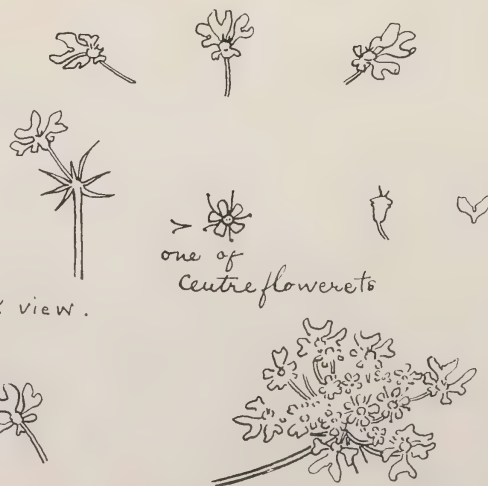
A *tankard*: "Its a long tankard that cannot be refilled"

A *bon bon dish*: "A dish where sweets compacted lie"

A *pair shoe buckles*: "We must go together"—*Dickens*

A *frame for a child's picture*: "Her angel face as the great eye of Heaven shyned bright, and maketh sunshine in each shady place"—*Spencer's Fairie Queen*.

Silver shoe buckles for a child: "O happy earth, whereon thy innocent feet doe ever tread"—*Spencer's Fairie Queen*



STUDIES OF HEMLOCK

PASTE FOR RAISED GOLD

IN the first place, the beginner should always buy the best make of paste, oils, brushes, etc., and have plenty of good brushes of the right kind; it is hard enough to do good work at the start with the best of everything. One hears it said that such and such old things will do for a beginner, when really the latter needs every possible aid more than a practised hand who can make shift with poor materials and poor tools when no better are to be had.

What is needed, then, for good paste work is the following: A vial of paste in powder, a bottle of fat oil of turpentine, an ounce of oil of lavender, pointed water color sable brushes, oo

on it and turning it over as before, if you find it stiffens too much, add a little more lavender and mix as before until the paste is thick and creamy and when turned over stays "put" and does not flatten out and yet is soft and easily workable; if it seems too thin, breath more on it and mix until it stiffens.

Take a little lump on the tip of your brush, do not allow the paste to work up any considerable distance into the brush as you will then find the brush spread and you can not make a fine line or dot. If you wish to make paste dots, just touch this lump of paste to the china, holding the brush at right angles to the surface, draw it straight up and it will leave a round dot with perhaps a little point at the top which will settle down, or



HEMLOCK—MARY THOMAS

To be executed in gold and red or gold and green.

and o, flat sables 1 and 2, a horn palette knife, a piece of ground glass 6 x 6 inches and a clean paint rag. The two fine brushes are for lines and dots, the flat sables are for large modeling.

Take some of the powdered paste on your ground glass palette, mix it with fat oil just enough to hold it together, rub it and turn it over with your horn palette knife, breathing on it at intervals. This breathing is of the utmost importance as it imparts a moisture to the mixture which cuts the oil and makes it pleasantly workable as no other medium will do. When the paste seems to be thoroughly mixed and fine, add a few drops of oil of lavender, rubbing the mixture, breathing

if it does not you can make it disappear by moistening the end of your finger and touching the dot very lightly. Take care in making the dot that you do not press the brush too strongly on the china, if you do your dot will not be round. If you wish to make a fine line, touch this little lump of paste to the china and draw it lightly but firmly along the outline; when the paste gives out, take up another little dot and continue, starting back on the line a little way so that it will be continuous and of even width. If the line or dot is not sufficiently raised it may have a second application as soon as it is partially dry, that is, when the shine has disappeared. Do not wait

until it is perfectly dry as that may cause the two layers to separate in the fire. If you wish to model a flower or scroll in the paste, use the larger brushes. Take up a dot as before on the point, touching the design lightly where the modeling is to be high and pressing the brush on the china where the design is to be lower and wider; any parts can be made higher by retouching when partially dry.

Many are the troubles met with in the paste work, but most of them will disappear when the worker becomes more accustomed to her medium. In some instances the trouble is due to under or over firing, too hard china, too much fat oil, etc., etc., but as a rule the real trouble is too little practice. If too much fat oil is used the paste will not stay "put" but will spread and run and look oily in drying. As a rule paste that looks oily when dry will chip or flake off or perhaps crumble in firing. If too much lavender is used the oils will separate from the paste leaving a moist spreading margin which will ruin anything unfired it may touch, the paste also will be rough after firing. If the paste is under fired it will crumble so it may be rubbed off with the finger, if over fired it will be difficult to make the gold adhere, if put on over heavy color without first removing the color from beneath, the color mixes with the paste and causes it to bubble and boil.

Paste for gold may be put on over a light unfired tint or lustre if perfectly dry, but for beginners it is safer to fire all under color first. Gold may be put on the paste when thoroughly dry, before firing, but it requires skill to get the best results in this way, so for the beginner it is safer to fire the paste first. Do not raise the paste too high or too sharp so that it will be disagreeable to the touch or catch the knife, fork, or spoon if used on the rim of a plate or saucer. Above all, if the paste does not look smooth and even, take it off and

try again, even if you do waste a little material, it is better to waste the material and the work rather than spoil the plate. Poor paste work is not to be endured by people of taste. It really is better, if you have the strength of mind and will, to practice paste work on a white plate for a week or so, washing it off every day and starting again, before you attempt to decorate anything definitely in this manner. Good paste work is a delight to the eye while poor paste work is the abomination of desolation.

HAZELNUTS

Henrietta Barclay Paist

COLORS, Sepia Brown or Fry's Meissen, Yellow Brown, Chocolate or Dark Brown. White Rose or Olive Green, Moss Green, Brown Green, Dark Green, Albert's Yellow, Yellow Ochre.

Paint the nuts for the first fire with the Green, White Rose, Moss Green, Brown Green, and the leaves same, strengthening in the darkest parts with Dark Green; stems in Sepia and Dark Brown.

For the second fire, wash the nuts with Yellow Brown all but the lightest parts, which remain green; pick out and shade with Sepia Brown, touch the leaves in the same way with sharp edges of Sepia or Dark Brown, stems shaded with Dark Brown. Paint the little tassel (catkin) with Moss Green or White Rose and shade with Brown Green, just a suggestion of Sepia or Yellow Brown at the dark and soften the shadow side.

A pleasing background can be made by using a little clear yellow and shading with the shades of green and brown at the darkest part.

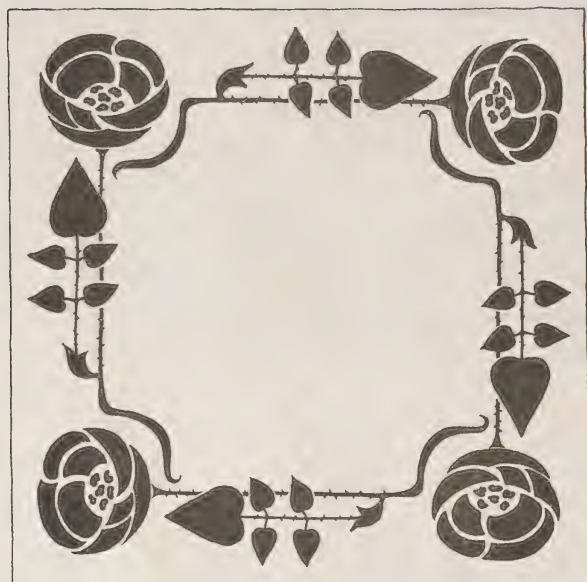


HYDRANGEA
RUSSELL GOODWIN





HAZELNUTS—HENRIETTA BARCLAY PAIST



TILE.

ROSE DESIGN FOR TEAPOT STAND

Edith A. Ross

THE roses are in golden yellow, shading to orange yellow in center. Leaves, stem and scroll are reddish brown. The background is ivory yellow.



MORNING GLORY—MRS. ALICE WITTE SLOAN

LEAGUE NOTES

THE Christmas rush is over. The lull immediately following should be of incalculable value to us, enabling us to concentrate our faculties upon the competitive work. Those who have worked out the study course in its entirety heretofore are numerically limited, consequently it is not unreasonable to expect a deficiency this coming year. A candid self-examination will show us wherein we have failed in our duty as members of the League, and we trust this will be an incentive to us to attack the seven problems with a will. We dare not suffer ourselves to hope that all members will do all of the problems, but we believe that all members can send at least one piece, and we earnestly beg them to do so.

Exhibiting should not be optional. Fulfilling all requirements of the educational course should not be optional. Each member should hold himself severely responsible for the success or failure of the year's work, should know the value of the criticism, and should accept as a privilege the bringing before members and the general public of designs and color schemes true to art. Let our comparative travelling exhibition be in demand by every club.

For the Lewis and Clark exhibition at Portland, Oregon, we suggest sending work already finished, articles that have been viewed from every standpoint, weighed in the balance and found—acceptable. In the KERAMIC STUDIO last year and the year before, were seen pictures of work worthy of any exhibition.

In Portland, Oregon, at the home of Miss Kate Gibbs, Wednesday, Nov. 16th, The Portland Keramic Club came into existence, with about twenty charter members. This is good news; we extend fraternal greetings and best wishes for their success.

BELLE BARNETT VESEY, President.



COFFEE SET

C. Verle Webb

FIRST sketch in panels $1\frac{1}{2}$ inch at top tapering to bottom. Tint top, panels and stem delicately in Miss Mason's blue green, or Lacroix night green. Paint small clusters of roses between panels with Miss Mason's peach blossom; paint tendrils in bright greens with touches of shading and brown greens. When tinting is dry, paint $\frac{1}{4}$ inch border around panels in liquid bright silver also band at top and sides of handle in silver, foot and knob in gold, also top and center of stem in gold, leave a narrow white panel on sides of foot in which paint several roses.

For second fire strengthen roses and tendrils, edge both sides of silver border with fine line of gold, paint small flowers and tendrils in gold on silver also on sides of handle. Back and inside of handle is of gold, bringing over edge $\frac{1}{8}$ of an inch on the silver. The lid is treated the same way as body. Sugar and creamer to match.



COFFEE SET—MR. & MRS. WEBB



PLATE BORDERS

Clara Hastings

THESE designs are to be carried out in gold and enamels either flat or raised; flat color and lustre could also be effectively introduced. A few suggestions as to color schemes are as follows:

1. Black portions of ground, flat gold scrolls and outlines in raised gold; dotted ornaments, flat Turquoise enamel; centers, dark Blue enamel; margin tinted light Yellow Green; jewels on rim, White; outlines, flat or raised gold.

2. Dotted portion, tinted Cream Lustre; dark portion, Yellow Brown Lustre; ornaments, flat light Yellow Green enamel; centers, dark Blue enamel; margin tinted light Yellow Green; jewels on rim, White; outlines, flat or raised gold.

3. Dark portions, Rose du Barry or some pretty salmon pink; white ground, a cream tint; dotted portions, Grey Green; jewels, white and outlines gold.

4. Dotted portions, Jonquil Yellow; dark portions, gold; white portions, White enamel; gold outlines.



WORKMAN WORSHIPS HIS TOOLS

Festival of Sri Pancham, Singular March Observance of India

OF all the many wonderful sights in that wonderful land of India, none is perhaps more striking to the European than the festival of Sri Pancham. Pancham is the god who looks after the implements of those who have to work for their living, and one day early in the year is set apart to pay homage to these implements. The night before the festival the mechanic polishes up his implements. If he is wont to look after a gas engine, he gives it a thorough overhaul, or if he be a carpenter, or a weaver or a blacksmith, he makes his tools bright and lays them out for the coming morn.

On the day of the festival the implements are festooned with flowers or other decorations, and during the day the religious minded Hindu offers dainties to his tool, particularly sweetmeats. While he offers the sweets he mutters prayers, invoking success to his future labor.

It is wonderful how the sweetmeat enters into the life of the Hindu. It is eaten out of all proportion to his other food; but then, an Indian sweetmeat is a sweetmeat. Many a Hindu family lives entirely on confections, and the latter do not carry with them the surfeit experienced after an overdose of butter-scotch. The Mayara and Halwi castes make the confections, and the delicacies are highly prized by all classes of people in India—so much so that the demand for them by the poorer families is limited only by their means. The dainties manufactured and sold by the Halwis require very considerable skill, and are very costly. So it will thus be seen that the Hindu, in offering sweets to his implements and his gods, does the best within his power to pay homage to that which brings him the wherewithal to live.

After the offering, the various castes congregate together, eat the sweets and hold high holiday. The higher castes, among whom are numbered the Government clerks, etc., pay homage to the items by which they get their living. At one ceremony some thirty clerks erected an altar on the roof of the buildings in which they work. The altar was made of an old packing case draped with paper, and surmounted by a large bottle of ink. Around the bottle were placed penholders, nibs, sealing wax, envelopes, blotting paper, and last, but not least, red tape. The clerks marched reverently to the ink bottle, etc., offering them gifts of food and coins, the service concluding as usual with a feast of sweetmeats. Only certain castes may eat of the sweetmeats offered by other castes to the gods.

It is laid down for instance, that a Brahman must avoid, if possible, eating any kind of food in the house of a Sudra (artisan), and that under no circumstances is he to eat any food cooked with water and salt by a Sudra, or touched by a Sudra after being cooked.

It is interesting to note that among the "clean" Sudras are weavers, sweetmeat makers, ironsmiths, goldsmiths, copper-smiths, braziers, carpenters, tailors and grain parchers. Among the manufacturing and artisan castes that are regarded as "unclean" Sudras are the brewers, tadi drawers and sellers of spirituous liquors, oil manufacturers, salt manufacturers, leather workers, mat workers and basket makers. Barbers are generally regarded as "unclean" and laundrymen are unequivocally classed in the same lot, the idea being that they have a lot of dirty washing to do. Certain domestic servants are also classed as "unclean."—*London Express*.

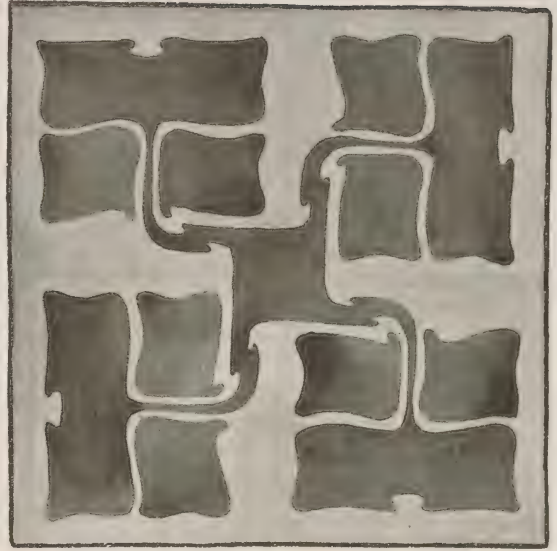


"SHOOTING STAR" DESIGN FOR SALAD BOWL—EDITH ALMA ROSS

Dark portions of design Dark Blue; light ground, Pearl Grey; dark grey portion, Light Brown; medium grey portion, Salmon Pink; flowers, Pale Cream; centers and pink petals, stems and leaves, Grey Green; outlines in Gold.



TILE FOR WINDOW BOX (REDUCED). FIRST PRIZE—E. A. ROSS.



TEA TILE (REDUCED). FIRST PRIZE—EDITH ALMA ROSS

LANTANNA

K. E. Cherry

FIRST fire:—Albert yellow, yellow brown and brown green and yellow red. Leaves are brown green, shading green and auburn brown. Stems are auburn brown and shading green.

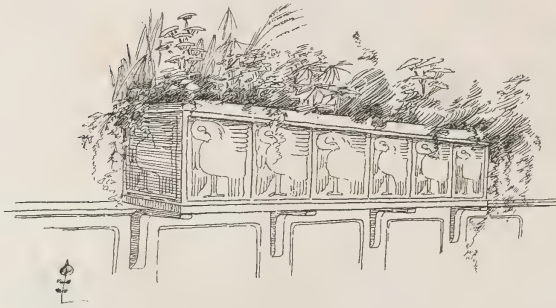
Second fire:—Yellow brown, yellow red, blood red. Leaves, yellow brown and brown green, shading green and black. Background, yellow brown, yellow red, shaded to auburn brown, brown green with touches of blood red.



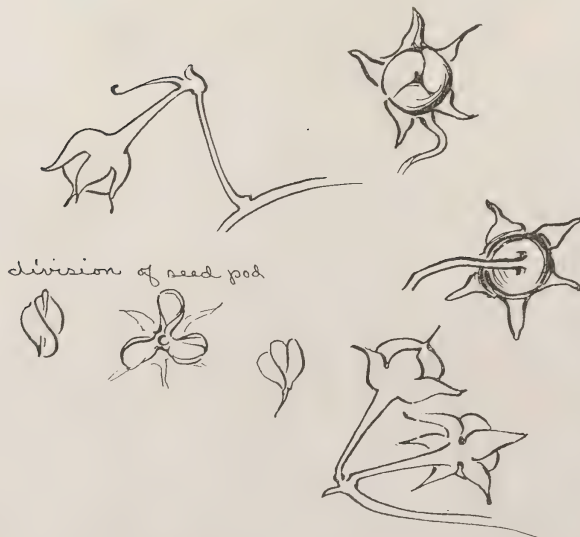
STUDIO NOTES

Mrs. A. L. Blanchard has closed her studio for the winter and has sailed for the Orient where she will devote her attention to gaining new ideas for tapestries, etc. Her studio will again be opened in the spring.

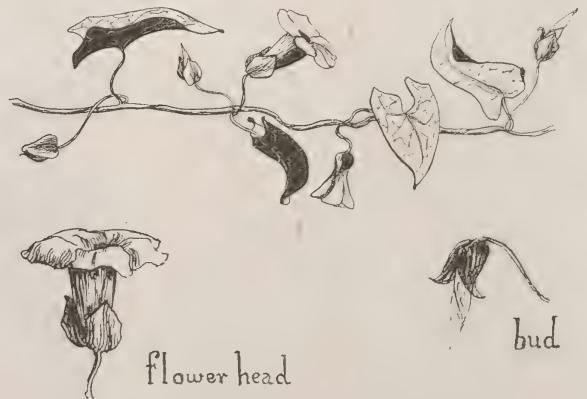
Mrs. T. McLennan-Hinman, of 293 5th Ave., New York, will teach in Chicago February 1st. For further information write above address or A. H. Abbott, Artist Materials, Chicago, Ill.



TILE WINDOW BOX—EDITH ALMA ROSS



MORNING GLORY SEED POD—AUSTIN ROSSER



CONVOLVULUS OR MORNING GLORY—YVETTE STORK



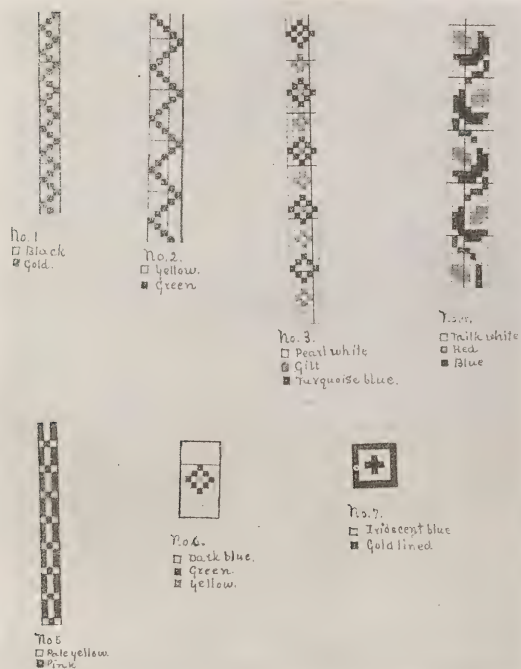
LANTANNA—K. E. CHERRY

THE CRAFTS

WOOD CARVING AND PYROGRAPHY. LEATHER AND METAL. BASKETRY, ETC.

Under the management of Miss Emily Peacock, Karol Shop, 22 East 16th St., New York. All inquiries in regard to the various Crafts are to be sent to the above address, but will be answered in the magazine under this head.

All questions must be received before the 10th day of month preceding issue and will be answered under "Answers to Inquiries" only. Please do not send stamped envelope for reply. The editors will answer questions only in these columns.



MISS G. POMEROY

Illus. No. 1

BEAD WORK

Miss G. Pomeroy

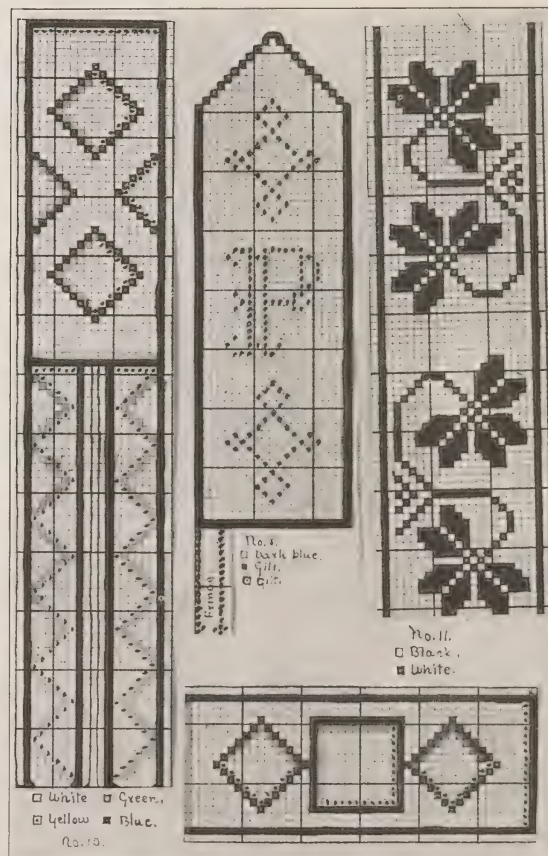
BEAD weaving is among the primitive arts lately revived and possesses distinctive artistic value when both design and color scheme are well planned. Many small articles useful and ornamental can be made in this medium, but as in all handiwork, unlimited skill and patience is needed.

Great care must be exercised in the selection of beads. Most of the beads are imported but they are not all fast colors and many of them quickly turn a dirty white. Most of the iridescent colored beads are treacherous, but the iridescent white bead is safe, also the opalescent white. Consider well the size of the beads and buy those that run regularly, if possible. Even the best beads vary in size and many must be discarded in order to make smooth work. The gilt beads, so much used, are likely to tarnish, but gold plated beads are on the market. The gold lined glass bead is the most satisfactory. It is well to buy more beads than needed, if there is any doubt as to quantity, for it is often impossible to match them. Different bunches of beads usually vary a little in color, just enough to ruin a nice piece of work.

Some beads have very small holes, while others will take in a No. 12 needle without any difficulty. It is well to carry a threaded needle when buying beads, testing each variety and remembering that, in loom work, the needle must pass through the second time. The No. 12 needle is the one usually used for

ordinary work. Not a sewing needle, but a regular bead needle. For the very fine work, needles as fine as No. 16 are used. Letter A sewing silk is the most satisfactory for use in the needle and purse silk for the warp or the foundation in the weaving of belts and chains. Strong linen thread, Taylor's or Marshall's, can be used for the warp, but linen wool thread is too fine to wear well. In examining a hundred year old woven chain, made on a silk foundation, not one thread of the warp was found to be broken. In the old woven chains the entire names of the makers and date of making are often found.

The simplest problem in bead work is the strung chain, selection and arrangement of the beads making the beauty. A very rich looking strung chain can be made of cut jet beads with an occasional bright colored bead. The fancy beads should vary in shape and color, the smallest being as large as a full grown pea, combined with both large and small jet beads. Carved ebony or sandal-wood beads often work in well and sometimes a tassel is put at each end of the chain. These tassels are made of small beads and show the same colors used in the chain. In this chain use as many strands of purse silk



MISS G. POMEROY

Illus. No. 2



Amber Chain

Loom with Belt
Colonial Necklace

Woven and Strung Chain

MISS G. POMEROY

Illus. No 3

as the beads will carry, and to fasten on the tassel, bring the threads down through the large beads at each end, spread the tassels open, and tie on with these threads. When the tassel falls back the knots are hidden if the tassels are full enough.

One and a half full bunches of 60 seed beads are required for a long braided chain. Use a large fancy bead for the heading of each tassel and at the end of each strand in the tassels have a bead the size of a small pea. These beads can be bought by the string, twenty-four in a string.

String six threads of No. 80 Marshall's linen, each three yards long with fine amber or any colored beads. Using two threads as one, make a regular three stranded braid. In stringing leave plenty of room at the ends of the thread to tie on the tassels, also have the beads very close on the linen so that there will be no slipping when forming the braid. Although made for a chain, this braid can be woven as a belt by wearing the chain double around the waist with the ends passed through the loop.

Woven work—A good loom can be bought at any bead store for fifty cents. There are many kinds but all are good that have rollers on which to wind the finished work. The Apache Bead Work Loom, as illustrated, is a very good one.

Design No. 1 may be worked out in black and gold or black and steel beads for a watch chain. If the beads are very fine make the chain five beads wide carrying out the same idea. Take four threads of black purse silk, each fifty two inches long and fasten into the loom. Use letter A black sewing silk and No. 12 needles, if they are fine enough for the beads selected. Take a piece of silk twice as long as usually needed in sewing and thread a needle on each end. With one needle pick up 2 black and 1 gold bead; push them to the center of the silk. Then place the beads under the warp

threads on the loom and push them up through. With one needle pass the silk through the beads above the warp and they will be firmly fastened. With the other needle pass the silk through the same row of beads the third time, drawing the threads closely. There will then be a needle on each side of the work. Pick up 1 bl. 1 gl. 1 bl. beads and press them into the warp. With the other needle fasten them above the warp. The work can be done with one needle but it is not alike on each side or so strong. If one thread chances to break the other will be likely to hold until the beads can be saved or the strand mended.

Always use beads of uniform size, and push each row up firmly before putting in another. When the threads begin to get short weave them back for a few rows and cut them off closely between the beads. If cut on the edges it will produce a ragged effect. If the chain is to be finished for a watch join the ends in a catch.

Design No. 2 is of Indian origin and works up prettily in green and yellow.

Design No. 3 is for a fancy chain finished with tassels. Use six strands of white purse silk, each strand being 64 inches long, for the warp and white silk No. A for the woof. The foundation beads are pearl white, the diamond figures of turquoise blue, and the centers and small designs of yellow. Each end is to be finished with a large blue and yellow bead,

Bostonia Purse
Rosebud BeltColonial Bag Design
Rainbow Chain
Sample for Design No. 7
MISS G. POMEROYOriginal Fob
Forget-me-not Belt

Illus. No. 4

below which should be a tassel of white beads, with one yellow bead after every five white ones.

Design No. 4 is very pretty and was called in colonial times the "Rosebud" pattern. The warp threads are of grey purse silk with grey sewing silk for the woof. The design may be made up in various combinations. Red buds, green leaves, and a white background would be pretty or a background of milk white beads, pink buds and leaves of blue make an effective combination if the colors are chosen so as to harmonize. If the chain is to be used for a watch it should be 52 inches long and finished with a silver catch.

Design No. 5 can be made either three or five beads wide using green in the background and pale yellow or white for the design.

Attractive chains are made by combining the woven and strung work as in illustration No. 3. Green and blue were the colors used with a dash of Indian yellow. For the warp take eight threads of black linen, each $1\frac{1}{2}$ yards long, leaving at least five inches of the warp for finishing. Weave in the design No. 6 which will make a space more than one inch in length. The background is of dark blue, the diamond green and the center bead yellow. When the design has been woven take the work from the loom and on one outside thread string 24 blue beads, 4 green, 1 yellow, 4 gr., 24 bl., 4 gr., 1 y., 4 gr., 24 bl. beads. Pass the second strand through these same beads, making one beaded string on two threads. On the third thread string 38 bl., 4 gr., 1 y., 4 gr., 38 bl. and pass the fourth thread through them. The third beaded strand should be strung like the second and the fourth like the first. These strands should be exactly even when finished and as the beads vary in size, it may be necessary to add or subtract a bead or two to even the ends. When the work is replaced in the loom weave in the same design as before. Carry the woof thread through one of the outside strung threads as it is better not to break the thread when it can be avoided. Make eleven of the woven spaces and eleven strung spaces. The ends are joined without any finish by weaving the threads back and forth. It might be well to make but half the design at the beginning and complete the figure at the end.

In design No. 7 the beads used were a beautiful deep iridescent blue, combined with gold lined beads. The woven section was seven beads wide, so use eight threads in the warp. On each of four warp threads string a few blue beads, after a few sections are made you can decide as to the whole number needed. On two other threads string a few gold lined beads and on one of the remaining threads string quite a quantity of gold beads. The eighth thread should be passed through the thread just strung, making one double thread.

When fastening the work in the loom enter first a thread containing blue beads, then gold, then blue next the double thread of gold, then the remaining blue, gold, and blue threads. Push the beads along and weave in the design, making the border and cross of gold lined beads and the foundation of the blue beads. When the first woven space is completed take two blue beads on the needle and weave into the first three threads. Push up 1 bl., 1 gl., 1 bl. beads, after which weave in two more blue beads. This makes a flower like figure or forget-me-not as it is called. Repeat this figure nine times and make nine similar figures on the other side of the chain. (See sample for this design, illustration No. 4.) Push up enough gold beads on the double thread to equal in length the figures either side of it and weave in another solid space. Gold and blue beads were combined with an occasional larger blue bead in the tassels. Each tassel was headed with a handsome blue and gold bead.

WATCH FOBS

Watch fobs are usually made about $5\frac{1}{2}$ inches long including fringe and about an inch wide. Some of the fobs are straight across the bottom with a fringe for a finish. These are usually pointed at the top where the catch is joined, they are also made straight across the top, and pointed at the lower edge, with a fringe below. Of course the warp threads cannot be of purse silk in such a short piece. Use twist, coarse or fine, or linen to suit the size of the beads. No. 80 linen is a good No. for the warp. Allow several inches of extra length for it is exceedingly difficult to string the fringe and fasten the ends if the threads are short.

Illustration No. 8 could be made of fine white beads with the design in silver or color or with a black background and design in steel or gun metal.

BELTS

Use purse silk for the foundation of all belts and as coarse a sewing silk as the beads will carry for the woof. If the belt is to be waist length only, allow not more than six or seven inches beyond the required length and join the ends with a buckle. Many of the belts are made long enough to cross in front, the ends falling ten or twelve inches below the waist line. The long belts often measure a yard and a half and are far more attractive than the short ones. It is an excellent plan



MISS G. POMEROY

Illus. No. 5

to line any of the belts with a piece of silk or ribbon and put hooks and loops on the crossed belts to fasten.

In design No. 3, it is better to arrange the warp on the loom so as to begin in the center of the belt and weave in the figure shown in the upper part of the design. This figure will not be repeated but the following figure will be until the belt reaches three inches below the waist line after the ends are crossed. The warp should then be divided into two parts and the small figure woven into the length of five or six inches in each part. When the narrow ends have been woven on one end of the belt readjust the work in the loom and weave the other half. Each narrow end should be finished with a tassel, headed by a large bead. Beads twice the size of the beads used in weaving could be put in occasionally when making the tassel. The background was of opaque white beads, the border, rectangle, and diamonds of blue with a touch of Indian yellow and green as indicated below the design. Each section should be separated by the bars of blue, green, and yellow. In the design the effect of a rectangle and diamonds is not brought out as the beads elongate any design to a marked degree.

The clover-leaf design for a belt still in process in the loom (illus. No. 3), was made with a black background and lavender figures; this is also effective worked out in black and white or

white and green. Illustration No. 5 shows what is meant by the divided ends. The center warp thread is not used in the weaving of the ends but woven back into the belt and cut off.

If by chance a belt is too short after being cut and started it is possible to piece the warp almost invisibly, if the threads are neatly woven in at different distances from the end, but if the new threads are started at the same place the join would surely show.

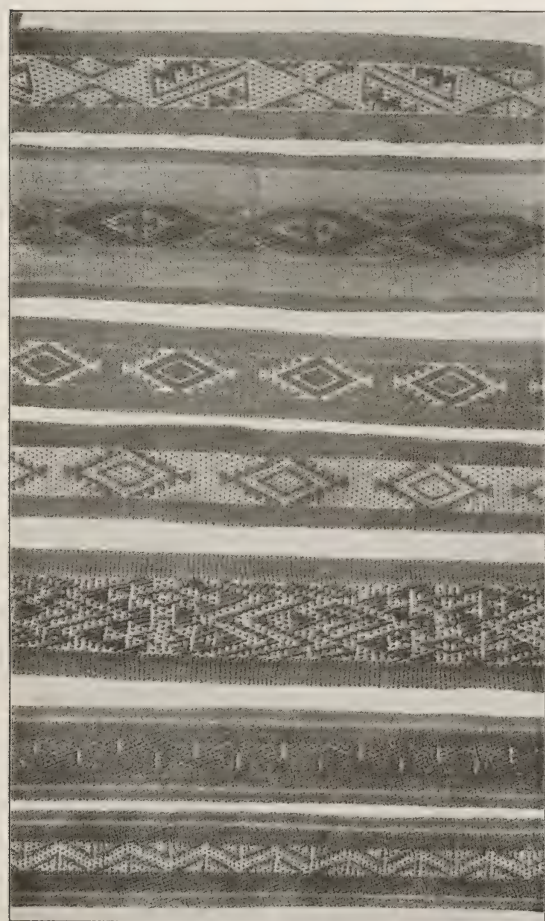
BAGS AND PURSES

In the olden days bags were usually knitted or sewed on canvas. In knitting the bags, a great feat was accomplished when the stringing was correctly completed, one mistake throwing out the whole design. The canvas was usually homespun cotton cloth, which was more evenly woven than that we get to-day. If the bag was to be made of dark beads the white cotton cloth was dyed.

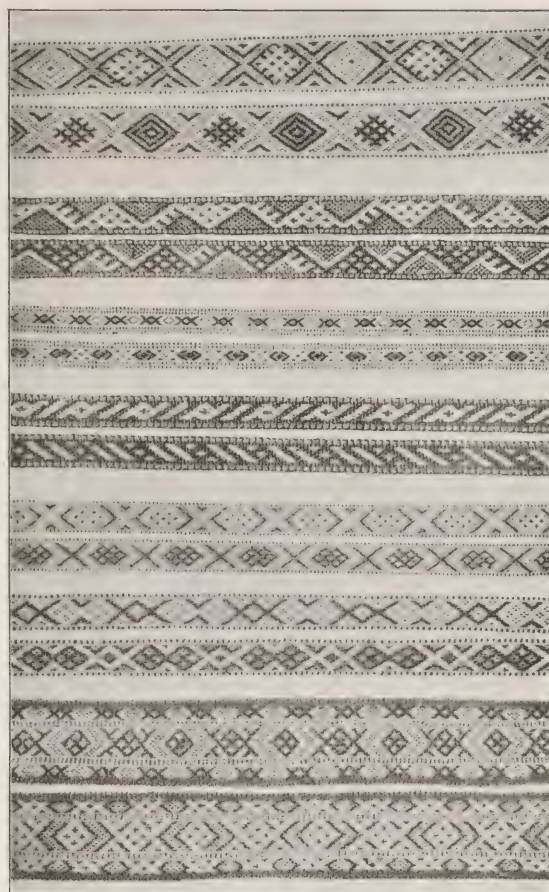
Canvas for bags and purses can be bought now having the patterns stamped on them, but these are to be filled in with large beads and are not so handsome or so artistic as the crocheted bag or purse of fine beads.

Card cases and purses are often crocheted and the bead covers can be mounted on the leather cases at a jeweler's or where these leather goods are manufactured.

The modern bag, when made of fine beads is usually crocheted and is very firm and strong if well done. The little



Illus. No. 6



Illus. No. 7

purse (illus. No. 4), is known as the Bostonia purse and directions for making can be bought with the tops. They are attractive made of white grey or steel beads knitted on white, green or grey purse silk. The little chain serves as a handle and is made five beads wide to match the bag. The chains are often made of sufficient length to be worn about the neck and allow the purse to fall below the waist line.

Letter A silk is used with the single crochet stitch. The bag is begun at the bottom and widened at each end until the full width of the bag is made, a process very similar to that of making a mitten.

The woven garters and belts in illustration No. 6 were made in Helsingfors, Finland, and those in illus. No. 7 by the Pueblos Indians. They are interesting in design, and should be helpful to workers in beads.

LEATHER WORK

IN the illustrations given there are several methods of treating leather. The equipment for these simple processes is small and inexpensive, as follows:

Two modelers, each having a tool on both ends; one tool is sharp and three cornered, called a liner, the other three are round and thumb shaped modelers, of different sizes. A piece of marble or glass, large enough for the leather used, a T square and triangle, a sponge and one or two cutting knives.

MATERIALS

For the magazine cover (illus. No. 1), Russian calf and Ooze calf. The note book cover (illus. No. 2), Russian calf,



Illus. No. 1

Grace Spalding.

also for the pocketbook (illus. No. 3). Ooze sheep skin or Ooze calf for the two card cases (illus. Nos. 4 and 5) and case for ribbon needles (illus. No. 6).

METHOD

The magazine cover, by Grace Spalding, could be made to

fit a book or magazine. There are three pieces used, one for the outside and one each side of this, inside for the pockets into which the cover of the book or magazine is slipped. Select the best part of the leather for the outside piece, cut all three pieces with a margin for working. The design should be accurately drawn on stiff paper and traced on the leather with a sharpened pencil; dampen the leather and outline all lines carefully with the liner. Use the modelers now, and with the leather still damp put down the background, this naturally raises the design, model the design a little giving only enough detail to relieve monotony. When all the modeling is finished and the leather perfectly dry, place it on a piece of soft wood and with the sharp cutting knife cut out the spaces, holding the knife in an upright position. To line these spaces, put the cover face downwards on a clean cloth and rub Sphinx paste into the leather round each space, taking care that no superfluous paste is left on them. Place the ooze leather over the spaces to be covered, and smooth it down with the fingers. Put it under a weight until dry.

The next step is to cut all edges perfectly true and lace them together. Make a line all round the cover about $\frac{1}{2}$ an inch from the edge, and punch holes on this about $\frac{1}{4}$ an inch apart. Take a metal rule and a sharp knife, cut narrow throngs from the calf skin, join them neatly with paste until you have enough lengths to go nearly three times round the cover. Commence at the centre or fold, and bind over and over through the holes leaving a long throng each side at the fold to tie through the centre of the magazine. The ends of these throngs can be knotted or Japanese coins, or beads, can be used to finish.

The cover for the note book was modeled, the sides being left long enough to turn in and make pockets for the cover of the note book to slip in. These sides can be stitched on a machine with the same colored silk, or laced with the leather throngs.

The card cases were made of sheepskin, ooze side outside. Trace the design on and without dampening the leather, outline all lines with the liner, and fill in the design or background with dyes or water color. Use the color carefully, rather put it on twice than too much at one time, and do not let it run



Illus. No. 4 Ava M. Froehlich.



Illus. No. 2 Ava M. Froehlich.



Illus. No. 5 Emily F. Peacock.

outside the lines. It is well to try the colors on a sample of leather first, and when it is satisfactory be sure that there is enough mixed. When the cases are finished and evenly cut line them with a thin leather making a pocket each side. Sew these carefully on the machine with the same colored silk.



Illus. No. 3 Mary Peckham.



Illus. No. 6 From Miss Barck's Studio.

The little case for ribbon needles was made in Miss Barck's studio. Two pieces are used for this, cut small openings in the top piece for the needles to slip through and stitch both pieces together on the machine. Use the same materials and method as given for the card cases.

The pocketbook (illus. No. 3) was made from light tan

colored Russian calf, one piece for the back and flap and one for the front. Model the design slightly and stitch the two pieces together on the machine. Fasten with a button or snap.



ANSWERS TO CORRESPONDENTS.

M. O.—Probably the cause of your enamel chipping off in the first fire, is the hardness of the French porcelain. You might try using $\frac{1}{2}$ flux. It is always best in using a new tube of Aufsetzweis to squeeze out the amount you may wish to use, on a fresh piece of blotting paper which will absorb the superfluous oil, this is also a good thing to do with an old tube where the oil has separated from the enamel. There would be less danger of chipping and you would probably obtain smoother results by mixing your enamel with oil of lavender instead of with spirits of turpentine and breathing on it if it tends to spread as with raised paste for gold. An article on the latter subject will be found in this number of KERAMIC STUDIO.

D.—There is no danger of firing your kiln too slowly—that is not the trouble with your paste and enamel. Possibly you are using a very hard kind of porcelain which often causes paste and enamel to chip. Read the article in this number on raised paste; the same directions apply to enamels except that if you use the tube enamel it is not necessary to add fat oil. Unfluxed gold is used just in the same manner as the Roman gold but on raised paste and over fired color, not on white china. The mat colors are dusted on as you dust on any powdered color, sometimes if they come out a little rough they are rubbed down with the finest sandpaper.

M. L. B.—You will find an article in March, 1904, K. S. in regard to the decorating of sets of china for table use. As to the price for a set of 140 pieces it would be impossible to give an estimate without seeing the finished work. The price depends upon the amount of work on the design and the perfection of its execution. It would range from \$150 to \$1,000 according to the value of the buyer's ability to pay.



HOLIDAY GIFTS

THE ROSE BOOK

For the China Painter and Student of Water Colors, "A combination of beauty and practicability"

\$3.00 postpaid

The Principles of Design

By Ernest Allan Batchelder

\$3.00 postpaid



For the Collector

Vol. II, Old China, bound blue cloth	-	-	-	-	-	-	-	-	\$2.50 postpaid
Vol. III, Old China, bound blue cloth	-	-	-	-	-	-	-	-	3.50 postpaid

Anglo-American Pottery

A Manual for Collectors. Old English China with American Views. Edwin Atlee Barber, A.M., Ph. D., Curator of the Department of American Pottery and Porcelain, Pennsylvania Museum and School of Industrial Art, Philadelphia, Pa.

Second edition revised and enlarged with one hundred and thirty-five illustrations - \$2.00 postpaid

William Adams, an Old English Potter

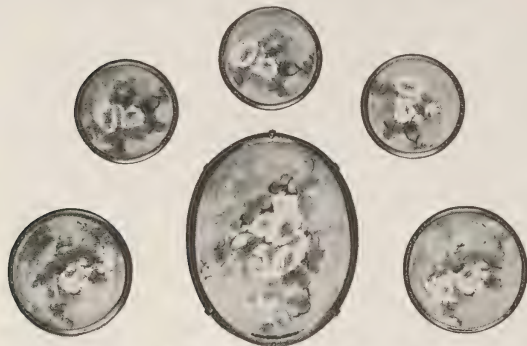
With an account of his family and their productions, edited by William S. Turner, F. S. S., author of "The Ceramics of Swansea and Nantgarw" - \$8.75 postpaid

Keramic Studio Pub. Co., Syracuse, N. Y.

MINERAL TRANSFERS

FOR CHINA DECORATION IN ALL ITS BRANCHES

SPECIMENS OF BUTTON DECORATION.



PALM, FECHTELER & CO.

80 FIFTH AVE., NEW YORK. 45 LA SALLE ST., CHICAGO. 1ST NATIONAL BANK, EAST LIVERPOOL, O.

APPLY TO YOUR SUPPLY HOUSE FOR
SAMPLES AND INFORMATION.

CHRISTMAS GIFTS

For the CHINA
PAINTER, POT-
TER or CRAFTS
MAN.

A Year's Subscription to KERAMIC STUDIO \$3.50
"THE ROSE BOOK" \$3.00
Postpaid

KERAMIC STUDIO PUB. CO.

SYRACUSE, N. Y.

WHITE CHINA TO DECORATE!

We have a fine new line of Havilands, new shapes of Vases. Also a full line of Haviland China in fancy pieces and Dinner and Tea Ware.

15000 Buttons and Medallions

at 4c each, 40c a dozen or \$4.50 in gross lots delivered at your door. Gold plate backs for Medallions, 19c. Write us for prices on Haviland and German China.

HUDSON CROCKERY COMPANY,

Department A.

348 SO. SALINA ST., SYRACUSE, N. Y.

ARTISTS' SUPPLY CO.
1009 Chamber of Commerce
CHICAGO, ILL.

Save Time!!—and Money!!

Artists' Materials, All Makes
at Lowest Prices. ❖ ❖ ❖

Mail Orders a Specialty. Write for Catalogue No. 5.

Emily J. Peacock

Worker in Metals. Enamelling.

The Karol Shop,

22 East 16th Street, New York.

FREE-- A Beautiful Flower Study with every
50 cent order for

China Painting Materials

Discounts to Teachers.

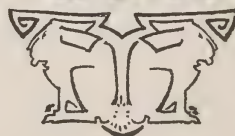
Send for Art Catalogue.

ERKER BROS. OPTICAL CO.,

608 Olive Street,

ST. LOUIS.

THE PRINCIPLES OF DESIGN



By Ernest Allan Batchelder, Throop Polytechnic Institute, Pasadena, California, formerly Instructor in Design, Harvard Summer School. The clearness with which the Principles of Design and Composition are defined through a series of problems makes this a unique and invaluable book for teachers and students. It is a mine of help and suggestion to the worker. It teaches the orderly expression of an idea in accordance with Elementary Principles. Individuality is its key-note. "Among its hundred and seventeen plates not one is useless or commonplace." The edition is beautifully printed. Price, three dollars.

PUBLISHED BY THE INLAND
PRINTER COMPANY, 120-130
SHERMAN ST. CHICAGO, U. S. A.

KEEP THE FIRE ALIVE

KERAMIC STUDIO

CONTRIBUTORS

MISS L. M. FERRIS * * * * *
MISS EDNA GAMBLE * * * * *
MR. RUSSELL GOODWIN * * * * *
MR. W. P. JERVIS * * * * *
MISS ADELINE LIENAU * * * * *
MRS. RHODA HOLMES NICHOLLS * * * * *
MISS MARGARET OVERBECK * * * * *
MRS. HENRIETTA BARCLAY PAIST * * * * *
MR. PAUL PUTZKE * * * * *
MISS EDITH A. ROSS * * * * *
MISS AUSTIN ROSSER * * * * *
MRS. ADELAIDE ALSOP-ROBINEAU * * * * *
MR. F. H. RHEAD * * * * *
MISS CATHERINE SINCLAIR * * * * *
MR. K. S. SUGANO * * * * *
MISS FLORENCE SEGSWORTH * * * * *
MRS. SARA WOOD SAFFORD * * * * *
MRS. BELLE BARNETT VESEY * * * * *
MISS ALICE WILLITS * * * * *
MRS. MARIE CRILLEY WILSON * * * * *

FEB. MCMV

Price 35c

Yearly Subscription \$3.50

A MONTHLY MAGAZINE FOR THE POTTER AND DECORATOR

CONTENTS FOR FEBRUARY 1905

	PAGE
Editorial and Exhibition Notes	213
Brush Work—Lesson VII	W. P. Jervis and F. H. Rhead 214
Persimmons	Paul Putzki 215
Louisiana Purchase Exposition "Ceramics"—continued	Grueby Faience and Pewabic Pottery 215-219
League Notes	Belle Barnett Vesey 219-220
Violet Plate	I. M. Ferris 220
Mushrooms	H. Barclay Paist 221
Mushrooms	Alice Willets 222-223
Studio Notes	224
Mullen	Russell Goodwin 224
Bread and Milk Set	Austin Rosser 225
Flower Pot Stand	Margaret Overbeck 226
Tea Tile	Edith Alma Ross 226
Cup and Saucer	Catherine Sinclair 226
Toast Cup	Florence Segsworth 227
Window Box in Tiles	Margaret Overbeck 228
Study of Bird	K. S. Sugano 228
Flower Panels	Sara Wood Safford 228
Border for Fruit Plate	Adelaide Alsop-Robineau 228
Bread and Milk Set	Marie Crilley Wilson 229
Cup and Saucer	Adeline Lienau 230
Monterey Cyprus Trees for Decorative Work	Edna Gamble 230
The Crafts—The Crafts at St. Louis	231-234
Answers to Inquiries	235
Treatment for Pink Roses (supplement)	Rhoda Holmes Nicholls 235
Kilns	F. H. Rhead 235
Answers to Correspondents	235

Some Leading Agencies of Ceramic Studio

We take pleasure in mentioning a few of the leading agencies for the sale of the KERAMIC STUDIO, where, also, subscriptions may be placed:

Boston, Mass.—Miss E. E. Page, 286 Boylston St.; Smith & McCance, Old Corner Book Store.
 Brooklyn—A. D. Mathews & Sons, Fulton Street.
 Buffalo—Mrs. Fillkins, 609 Main Street.
 Chicago—A. C. McClurg & Co., Brentano's; Burley & Co.
 Cincinnati—Miss M. Owen, 245 Elm Street; A. B. Closson, 4th Street near Race; Traxel & Mass, 4th Street, near Elm.
 Cleveland, Ohio—Vinson & Korner, 150 Euclid Ave.
 Columbus, Ohio—Lee Roessler, 116 So. High Street.
 Dayton, Ohio—W. W. Kile & Co.
 Denver, Colo.—E. Meininger, 807 16th Street.
 Detroit, Mich.—L. B. King & Co.
 Hartford, Ct.—E. M. Sill.
 Grand Rapids, Mich.—Miller, Wolfe Co.
 Indianapolis, Ind.—Keramic Supply Co., Lemcke Building.
 Kansas City, Mo.—Emery, Bird, Thayer Co., Geo. B. Peck Co.
 Louisville—Louisville Book Store.
 Minneapolis, Minn.—Minn. Art China Co., 607 1st Ave. So.

New York City—Brentano's, Union Square; M. T. Wynne's, 11 E. 20th St.; The Fry Art Co., 36 W. 24th St.; Wanamaker's; American News Co. J. B. Ketcham, 107 W. 25th Street; M. J. Whaley, 430 5th Ave.
 Newark, N. J.—Keramic Novelty Co.
 Oakland, Cal.—Smith Bros.
 Omaha, Neb.—Magenh Stationery Co.
 Philadelphia—Wanamaker's.
 Pittsburgh, Pa.—Otto Schaffier & Bros.; Kurtz, Langbein & Schwartz; R. S. Davis & Co., 346 Fifth Ave.; John G. Yergan, 36 Fifth Street.
 Reading, Pa.—Rowland's Book Store.
 Saratoga Springs—Robson & Adee.
 San Francisco—Mrs. M. E. Perley, 207 Post Street.
 Sioux City, Ia.—J. K. Prugh, 312 Nebraska Street.
 St. Louis—F. Weber & Co.; A. S. Aloe & Co.
 Syracuse—Wolcott Book Shop; Welch & Hollingsworth; W. Y. Foote; A. L. Varney & Co., 336 S. Salina Street.
 Tacoma, Wash.—Art Exchange, Mrs. Mead.
 Toronto—The Art Metropole.
 Warren, Pa.—Alzora Bashline.
 Washington, D. C.—Woodward & Lothrop,
 The Magazine may also be ordered from any news dealer or book store in this country, who can procure it through the American News Company, New York, or its branches.

KERAMIC STUDIO

Vol. VI, No. 10

SYRACUSE, NEW YORK

February 1905



THE New York Society of Ceramic Arts talks of holding its next exhibition at the National Arts Club. If it is possible to make this arrangement with the Arts Club, the Society will be able to place its work before the best of critics, and a favorable reception would be of the utmost value, as placing the work on as high a plane as other arts and

crafts. Naturally such an exhibition would be of educational rather than financial value, although in the end, a higher reputation would bring more remunerative sales. It has been suggested by the president of the Society that individual members would find private studio sales more remunerative for small articles and the best efforts could then be reserved for the exhibition at the Arts Club. This seems to us an excellent plan since above all things we would wish to see the work of overglaze decorators received as a not unworthy companion of other arts and crafts, as it deserves to be.

✱

The prizes for the competition which closed January 15 will be published in the March number of KERAMIC STUDIO. See announcements on back of cover for subjects of the various monthly competitions.

The Problem for the competition closing April 15 will be a conventionalized border for a mushroom plate. Illustrations of the mushroom will be found in this number of KERAMIC STUDIO. First prize, \$5.00; second \$4.00.

✱

"Philosophy of Color" is a seventy-two page cloth-bound book from the press of Clifford & Lawton, New York; it treats of the subject of color in a most interesting way. The knowledge of color harmony has usually been regarded as an occult and mysterious accomplishment, but by a few simple rules and explanations the author has brought the subject within the understanding of anyone.

He explains why in the furnishing of a room yellows and reds should go into an apartment having a northern exposure: as there is a deficiency of sunlight in the north end of a house, the colors used therein should supply this lack of warmth. For the same reason, a room having a southern exposure would be made positively glaring by the use of sunny colors, and in such a room deep greens and blues or cold colors should be used. He talks of receding and advancing colors, and tells what the receding colors are and why they make a small room look larger; he goes into the illuminating qualities of white and luminous tones and gives innumerable rules for the correct way of determining color contrast. The colored chart which accompanies the book shows not only the primary colors, but the nine other colors formed from the primaries. It shows also in color the correct contrasts and the correct harmonies. The woman who is interested in dress will understand why green makes her complexion look fresher, why black takes the color out of her face and why white illuminates. Whether in questions of dress or in the higher forms of interior decoration the book treats of the why and the wherefore in a way that is easily understood.

John Lane has just published a very handsome volume, "Hispano Moresque Ware of the XV Century," by A. Van de Put. The majority of the pieces chosen for illustration, and many are given in colors, are unique or of extreme rarity. The book treats only of the wares which were made in the XV century, especially in the district of Valencia, after the province had passed under the control of Spain, the decoration of which, although strongly influenced by the purely Moorish ornament of the XIVth century, begins to become more independent, especially in the treatment of plant form. The decoration consists of mock-Arabic characters, spur bands and cross-hatching, gadroons, and flowers and leaves in allover patterns, especially the vine leaf and bryony leaf. In many cases coat of arms either in center or on side of dishes add to the richness of the ornament and these coat of arms have more than anything else allowed the author to reconstitute the history of the ware. This book will be invaluable to collectors interested in old European potteries, and the somewhat intricate but extremely rich decoration will be of great interest to students of design.

✱ ✱

EXHIBITION NOTES

THE Handicrafters of Brooklyn held an exhibition of their work at 160 Joralemon Street, Brooklyn, December 7th and 8th. The exhibition was a very successful one and this body of workers hopes soon to organize, and open a crafts house where they can have workrooms and a permanent exhibition.

Among the exhibitors in pottery Mrs. Worth Osgood had some very creditable work, also Miss Jane Hoagland, Miss Florence Knapp, and Mrs. M. White Talbot. The metal workers were well represented, Miss Marie Zimmerman had a number of original pieces of jewelry, Mrs. E. P. Day Rankin a chased silver card plate, Mr. H. Whitbeck some rings and silver spoons, Miss M. D. Peckham some jewelry, Mrs. I. P. Conklin some silver belt buckles, Mr. W. C. Stimpson a very attractive silver porringer, Emily F. Peacock a necklace in silver and Amazon stones, a silver cream spoon and some work in copper. Miss E. Chapin had a number of well bound books; Miss Mina D. Behr, Miss G. Heath and Miss Vaughan, modeled leather and stencils. Mary White Talbot and Mary Acker, basketry.

✱

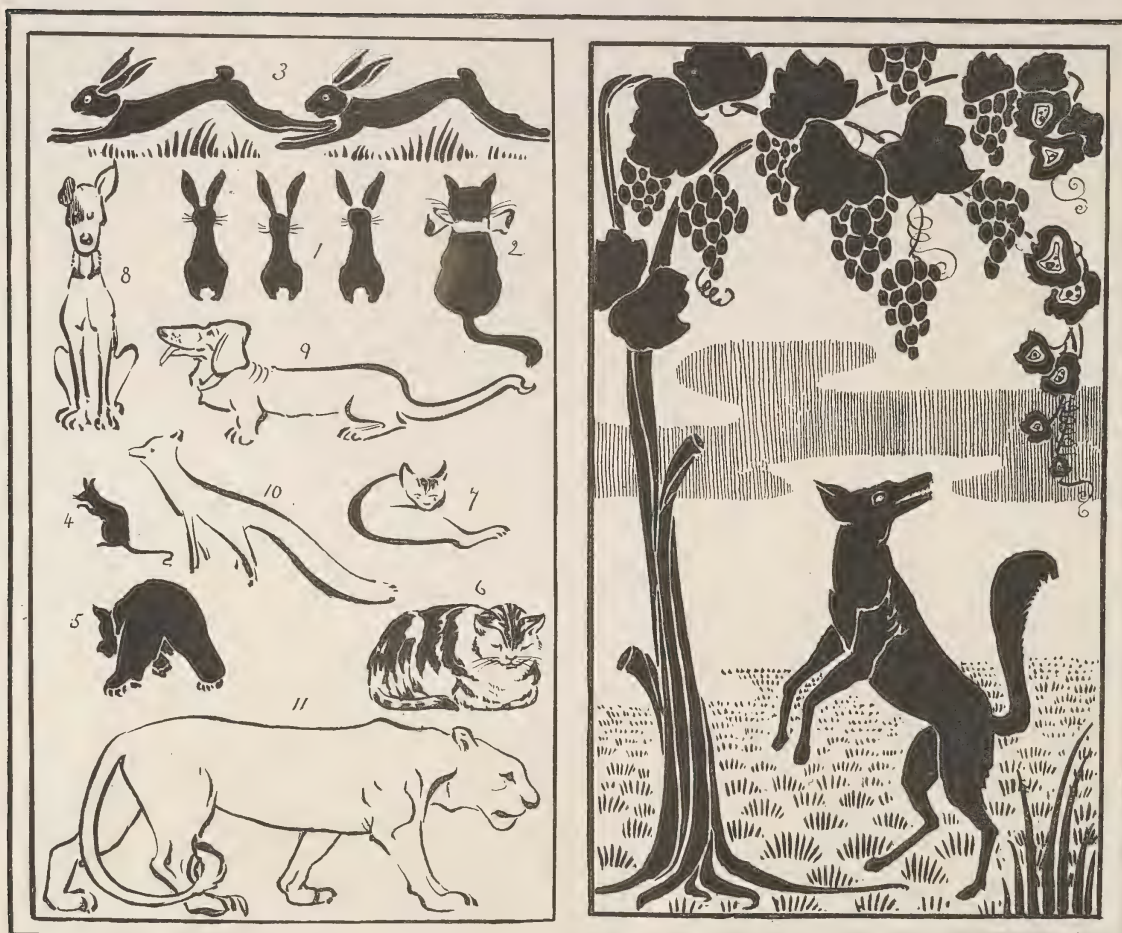
Mrs. Wendell T. Bush held an exhibition of hand weavings and needlework, Thursday, December 8th, at 167 Joralemon Street, Brooklyn. A greater part of the exhibition had been collected by Mrs. Bush in her travels abroad; beautiful bits of finely woven tapestry from Greece, a wonderful red embroidered East Indian petticoat, embroidery from Holland, and needlework from the convents are only a few items in this most interesting collection.

✱ ✱

SHOP NOTES

The old firm of Marsching & Co. is now B. F. Drakenfeld & Co.

The Fry Art Co. are sending out a new catalogue of their artists' materials with a very attractive and artistic cover.



BRUSH WORK

W. P. Jervis and F. H. Rhead

CONTINUED

LESSON VII—GIVING HINTS ON DRAWING ANIMALS

IT will be advisable to use a grey paper for these studies, which show the possibilities of depicting animals with a few simple strokes. The student will find it invaluable practice if he will carefully watch various animals and jot down sketches in a similar method to that shown in figures 1 to 5, for as may be readily understood it will impress upon him the form of different objects much more efficaciously than any other method. Not only that, but the pupil will find that he can draw a firmer line and is less fearful of making a bad line, for the form is now impressed on his mind in place of the neat outline he has been in the habit of considering. The student is apt to consider only the lines as he is able to see them, without a thought of proportion or relationship of one mass of lines or shapes to another and the result is usually a weak outline from memory, without form, because form has not been considered. Now if instead of the pencil the student had used the brush he would not only make better forms but better

outlines. Do not be deterred by a few failures, a little perseverance is all that is necessary.

The rabbits in No. 1 can be painted in Vandyke Brown, with a touch of white for the tails. Nos. 6 and 7 show two different methods of drawing cats. Nos. 8 to 11 are examples of outline drawn with a brush. All these studies may be done in natural colors, using a darker color for the outline. The panel "The fox and the grapes", is adapted for either pyrography or underglaze colors. The sky should be sponged in yellow with orange cloud. The foreground in yellow green with grasses in a darker green. For the fox use a reddish brown, the trunk of the vine a russet brown, the grapes in purple and the leaves in two shades of green.



PERSIMMONS

Paul Putzki

For the fruit use light violet, Albert yellow, shading with carnation and brown green. The leaves, dark green, yellow green, brown green, with touches of yellow red and dark brown. The background may be treated in the same colors.



PERSIMMONS—PAUL PUTZKI

LOUISIANA PURCHASE EXPOSITION CERAMICS

(CONTINUED)

GRUEBY FAIENCE

When the Grueby Pottery first sent out its bowls and jars with its fine mat and craquelé green glazes, few dreamed that these quiet restful pieces would take such a hold upon the popular fancy—and after that the deluge! Everyone with a ceramic leaning made haste to discover a mat green to sell while the fever lasted. Many have been the mat greens put upon the market since then and each potter claims his to be the one and only perfect glaze, but the fact still remains that the Grueby green is the most satisfying and the interesting craquelé effects have rarely been approached by any potter. It is to be regretted perhaps that the body is not of a finer grain, but for interior work that is not of so much consequence. The business of the Grueby pottery, everyone knows, was originally the making of drain and sanitary piping, etc., the art ware necessarily must have been of the same materials to



FIREPLACE
BORDER
AND
FIREPLACE
OF
GRUEBY
FAIENCE



FEBRUARY, 1905
SUPPLEMENT TO
KERAMIC STUDIO

ROSES—RHODA HOLMES NICHOLLS

COPYRIGHT, 1905
KERAMIC STUDIO PUB. CO.
SYRACUSE, N. Y.

avoid too great complexity of production. The most interesting part of their work at the present moment is the tiling for fire places, flower pot stands, etc., which, while green predominates, is executed in various subdued colors and is excellent in design. A new feature introduced at St. Louis was the scarab letter weight in a mat green or blue, which admirably suggests the scarabs of the pyramids and the Nile country.



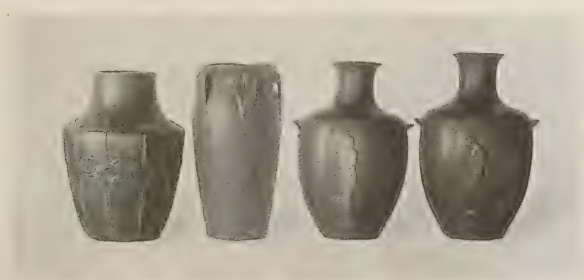
SCARAB LETTER WEIGHT—GRUEBY FAIENCE

The Grueby shapes are simple. It is evident that a man of artistic tastes directs the form and decoration. The colors are somewhat limited, the best being the green, and brown; a blue



GRUEBY VASES

and yellow and some grey tones are also made, and in the tiling make a most harmonious and restful effect. The vases are thrown on the wheel, but the finishing is by hand and the completed piece has not that commercial finish so



GRUEBY VASES



GRUEBY VASE

common to most of its imitators. Much of the relief work is done by young girls and boys under careful direction, putting on the lines of relief clay and modeling them with tools.

Whatever the ceramic reputation of Grueby may be in coming years it must always have the credit of having set the standard of taste for quiet things and of having had a great educational effect upon the American public.



HOME OF THE PEWABIC POTTERY—MARY CHASE PERRY



MARY CHASE PERRY AT WORK

MARY CHASE PERRY, POTTER

Among the host of potters which the ceramic movement in this country has brought to the front in the past three years there are a few names which stand out from the mass of imitators, by reason of original and hard work. Among these Mary Chase Perry deserves place in the first rank. Originally a china decorator of the naturalistic school, dissatisfied always with the results obtainable under the old regime, she has at last found her medium of expression in the "Pewabic Ware" which she makes in her little pottery at Detroit, Michigan. The pieces which were shown in the Michigan building at St. Louis stood out from the mass by their simple shapes and quiet color. Of all the mat glazes on pottery, the yellows, buffs,



MARY CHASE PERRY'S STUDIO SHOW ROOM

and browns which Miss Perry has developed, seem most a unit with the vase itself. The texture is the most satisfying and the color a relief from the eternal mat greens with which every would-be potter is trying to outdistance Grueby and win fame and fortune before the fad is past. Quite recently Miss Perry held an exhibit of the results of her past two year's quiet work and the effect more than equalled expectation.

With only three helpers, Mr. Caulkins, with whom she is associated in the making of the Revelation Kilns and who is as enthusiastic as she over her work, one man to throw the forms on the wheel, for she uses no moulds, and a young boy to do the "odds and ends," she has turned out not only an astonishing amount of work but many pieces of unusual artistic merit which will assuredly bring her merited success in a financial way.



FLOWING MAT GLAZES—MARY CHASE PERRY

Miss Perry is not limited to the buffs and browns for color but we mention these as being especially unusual and interesting. She has quite a range of color on which she can rely as well as many unexpected and unusual effects, such as unexpected natural crystallizations. Her pottery is fired at cone 4 and quite well vitrified so that it holds water well, as do not many of the lower fired wares. Much of her decoration is in rather high relief and the ideas are often unique both in thought and execution—notably the peacock design for lamp and the flower growth arrangements where the roots form the base and support of the piece.

The Pewabic ware is named from an Indian river near Miss Perry's home.



LAMPS

MARY
CHASE
PERRY



Lamp has three Peacocks with tails forming base. Shade made up of eyes of feather—a golden brown glass in ground work.

The Dandelion lamp has leaf, stems and puff ball in base and shade suggesting the flower growth. The morning glory shade gives quite a Japanese suggestion—pale dull blue ground with opalescent tones—flowers in deep blue, made with extremely fine leading, almost like wire. Has been much admired by Mr. Frear who compared it with an old Japanese screen.



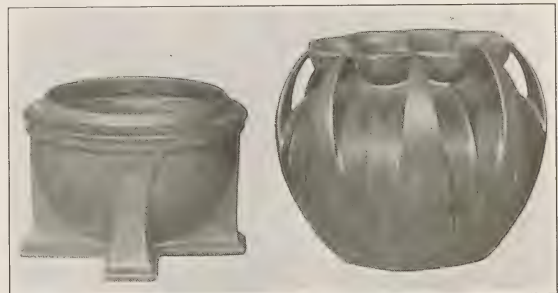
TECO PORCELAINS WITH CRYSTALLINE GLAZES

TECO WARE

To Mr. Gates of Terra Cotta, Ill., is due the credit of being the first to put upon the American market crystalline glazes of the type developed abroad and of extraordinarily large crystallizations. While Rookwood had experimented in crystalline glazes as early as 1900 and had made its tiger eye and gold stone effects, these were not generally recognized as crystalline glazes. At St. Louis the Teco pottery's exhibit included a small case of these crystallizations which were interesting in the extreme.

While these crystalline glazes made at the Teco pottery have not the depth and fine texture of the Sevres, Royal Copenhagen and Rorstrand crystallizations, probably because the porcelain body is not so fine, nor the variety of the Royal Berlin, they are still extremely interesting and beautiful and a novelty for the lover of ceramics. The main output of the Teco potteries however, is composed of vases, lamps, etc., in a mat green of fine texture and of original, though rather complicated shapes. Mr. Gates also makes the largest garden vases and architectural pottery in the United States, some of the garden vases being four feet high.

TO BE CONTINUED.



TECO MAT GREEN POTTERY!

LEAGUE NOTES

WE are requested to give a more explicit statement regarding our two exhibitions. They are: first, the exhibition at Portland, Oregon, at the Lewis and Clark Centennial, beginning June 1st, 1905 and continuing until November 1st, 1905. And second, the Comparative Travelling Exhibition which will be held at The Art Institute, Chicago, from May 9th to May 24th, 1905, inclusive.

For Portland we have asked for pieces already on hand, more plainly speaking, those accepted by the jury for St. Louis, and those which should have been submitted for that exhibition. We know those pieces to be worthy our members and a credit to the National League of Mineral Painters. This exhibition need not comprise a great number of pieces, but should be composed of very choice articles. They would then be installed in the Art Palace without question. Announcements concerning this will follow later.

Our second exhibition will be composed of the problems of our educational course for this year. The results emanating from these, are to be brought together at this opening exhibition, as heretofore, after which it will be started on its

regular itinerary. All pieces are to be judged by a competent jury; the judgment, or criticism, written on a slip and sent to the owner.

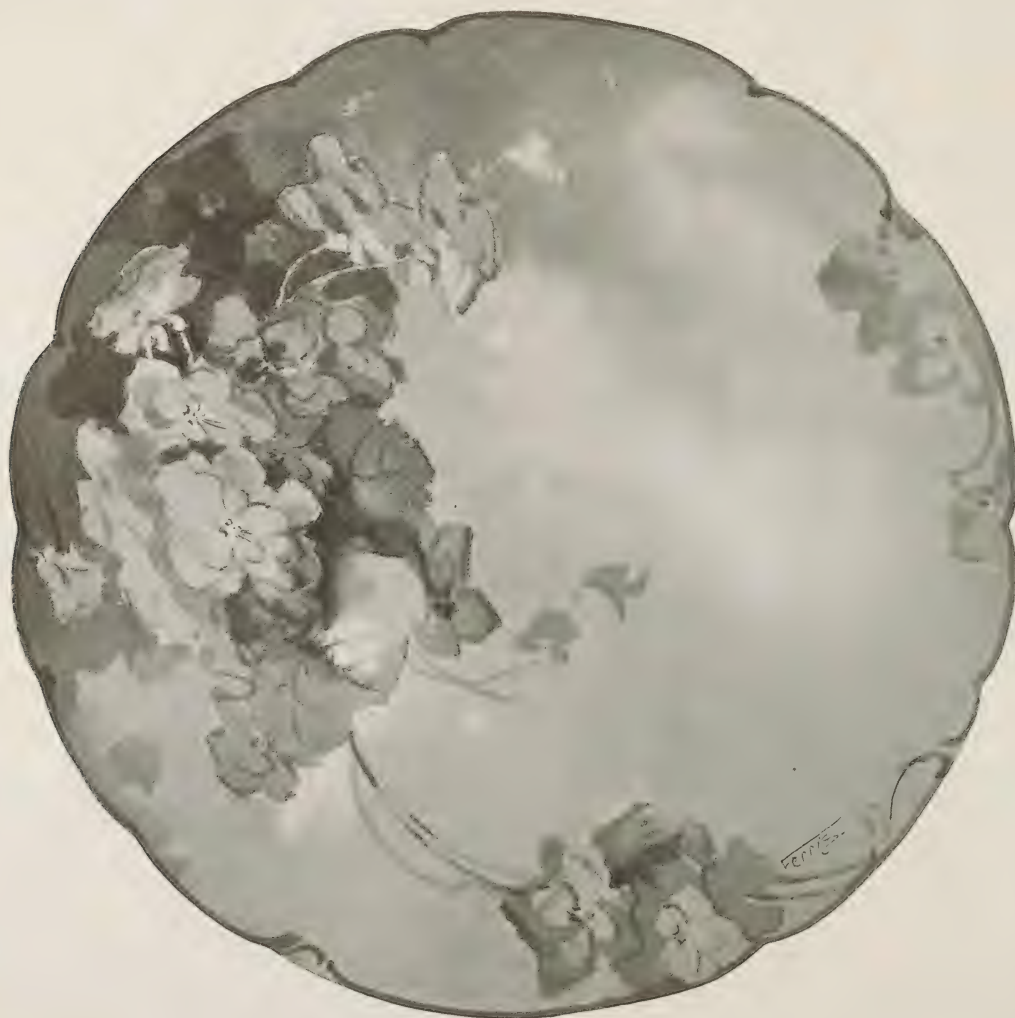
Only those who conscientiously have worked all of these exercises can comprehend the value of the criticisms, and the benefit derived from viewing and comparing them with their own. We have over four hundred members; we should have three hundred, or surely two hundred, tiles. If in working out our own tiles we have resorted to no plagiarism, no adaptation, have used hands, head, heart and soul, think of the knowledge we will gain in that comparison.

Will only one half of our class respond? In these days of large things, when educational work is sharing in the general

expansion of aim and resources, when all cherish the worthy ambition of success, it is preposterous to believe that less than one half of our members will respond. If as in the case of the tile, we have as many cup and saucer designs, jars, plates, bowls, slabs, and cylindrical vases (all contained in this course) it will show the serious application of which our members are capable, and will give cause for rejoicing.

On Sunday January 8th, while listening to the memorial concert given by the Chicago Orchestra as a tribute to Theodore Thomas, another name—Anna Armstrong Green— was silently woven into the sweet "Tone Poems" by her co-laborers; her life and work have left an imprint for good.

BELLE BARNETT VESEY, President.



VIOLET PLATE—I. M. FERRIS

FOR light violets use a thin wash of Sèvres Blue and Royal Purple and same colors used stronger for darker ones. In darkest places use a little Dresden Deep Violet with blue.

Do not try to make any of the flowers very double in first

fire but keep them clear and clean. In leaves use Moss Green, Brown Green and Dark Green. For background use Albert Yellow in lightest part, next tone lavender glaze and the violet and blue in deepest tones with Purple Black. Dust with same colors and retouch in second fire with same.



INKY COPRINUS

MUSHROOMS

H. Barclay Paist

TALL LEPIOTA (PARASOL MUSHROOM)

THIS mushroom is cream white with brown patches, stems same white shaded irregularly with brown, white gills. For shading use Copenhagen Grey, for brown markings Sepia. These mushrooms grow from 3 to 7 inches high and are among the most beautiful mushrooms.

GENUS CORTINARIUS

Paint the top of the mushroom a creamy brown. The gills are lavender, varying from a deep color in the young ones to a pale color and turning brown in the old ones. The small mushrooms in the study are the Cortinarius Alboviolaceus, they have pale lavender caps with deep violet gills; stems color of the caps. They may be found in clumps of moss and with

bits of the moss often sticking to them in little patches. For the pale color use a delicate mixture of blue and rose pink, using deep violet (Ruby Purple and Dark Blue or a prepared Violet) for the gills. Copenhagen Blue with a bit of violet added will do for the caps and stems. For the moss, Moss Green, Brown Green and Dark Grey.

INKY COPRINUS (INK CAPS)

The caps and stems are of a creamy or smoky hue. Use Dresden, Yellow Ochre and shade with Copenhagen Grey. The gills are the color of ink (blue, black), use Black, adding a little Dark Blue and Ruby. The spotted ink cap is darker in color. Use same colors for caps and stems, only stronger, making the spots with Sepia. The gills are similar to those of the former variety. Make the soil around look mossy and rich with greens and browns.



TALL LEPIOTA



CORTINARIUS



MUSHROOMS—ALICE WILLITS



MUSHROOMS—ALICE WILLITS

No. 1—Deep buff cap, gills and stems cream white, brown roots. No. 2—Violet cap, buff gills and cream white stem. No. 3—Deep orange stem shading from light to dark orange at base, brown roots. No. 4—Brown red cap, stem yellow shaded with red. No. 5—White cap, cream gills, brown wood. No. 6—Brownish buff cap, cream stem shading darker at base. No. 7—Orange cap, yellow gills and stem. No. 8—Dark red cap, gills and lower part of stem yellow, upper part of stem pinkish. No. 9—Greyish cream cap and stem, gills pale lavender. No. 10—Grey cream, brown roots. No. 11—Dull red top, gills and upper part of stem yellow, middle of stem darker red shading to cream at base, brown roots. No. 12—Light brown cap, stem and roots, cream gills. No. 13—Greyish cream. No. 14—Pinkish cream cap,

stem and gills lighter. No. 15—Pale pinkish grey, brown roots. No. 16—Scarlet top, cream gills and lighter stem. No. 17—Violet cap, cream gills, pinkish stem. No. 18—Cream. No. 19—Pinkish cream cap, deep yellow under. No. 20—Brownish orange cap, grey cream gills and brownish stem. No. 21—White. No. 22—Pinkish buff cap, white gills and stem. No. 23—Blue grey cap, pinkish cream gills and stem. Nos. 24 and 25—White. No. 26—Brown cap and stem, yellow gills. No. 27—White with touches of yellow in center of cap and blackish scales on stem. No. 28—Black with white border on brown wood. No. 29—Light pinkish brown. No. 30—White. No. 31—Cream. No. 32—Orange. Nos. 33 and 34—Deep yellow cap, cream gills and stem.

STUDIO NOTES

Mrs. Anna Armstrong Green, wife of Thomas S. Green, M. D., and only daughter of Rev. and Mrs. F. C. Armstrong, died at the home of her parents, 743 Harrison Street, Chicago, Friday night, January 6th.

Mrs. Green was a member of the "Chicago Ceramic Art Association" and the National League of Mineral Painters. She was well known in the art world where her original line of work and exquisite creations won for her a high place. The strength and beauty of her compositions were the result of careful, painstaking, thoughtful study, combined with a refined and keenly artistic temperament.

Personally Anna Armstrong Green was a most lovable woman, gentle, conscientious, and thoroughly womanly, and, I but voice the sentiment of the entire colony of Chicago artists when I say, that not only as an artist, but as a dearly beloved comrade and friend, will she be missed from our circle.

MINNIE C. CHILDS,
2nd Vice-Pres. Chicago Ceramic Art Assn.

Mr. Cobden of Philadelphia sent us as a Christmas greeting a dainty reproduction in color of his roses, about three by four inches in size.

HOW TO TELL AGE OF POTTERY WITH A MAGNET

THE attempt to ascertain the age of a porcelain vase by testing it with a magnet may appear ridiculous, but a French scientist claims, with much plausibility, that he can fix approximately the dates of all potteries in this way.

The magnetic needle does not, as many people suppose, point exactly to the north, but deviates from a north and south line to an extent which differs in different places, and also varies from year to year at the same place.

At Paris, for example, this deviation, or "declination," as it is technically called, was $11\frac{1}{2}$ degrees to the east in the year 1580. In 1663 there was no declination—that is, the needle pointed due north. Since then the declination has been westerly. The greatest westerly declination—about $22\frac{1}{2}$ degrees—occurred in 1835, since which time the needle has been slowly coming back to the meridian. The declination is now less than 15 degrees, and in another century it will be zero.

Furthermore, a freely suspended magnetic needle does not lie horizontally, but dips toward the north, and this dipping or "inclination" varies, as the declination does. It is evident that if we know the inclination and declination for all past times or know the laws of their variations, so that we can compute their values at any epoch, we can fix the date of any occurrence by the declination and inclination at that time.

Now most clay contains iron and is magnetized in the direction of the prevailing magnetic force—that is, parallel to the compass needle. When the clay is "fired," or baked, the direction of this magnetism becomes fixed, parallel with the direction of the compass needle at that instant. Hence, if the resulting vase or brick were undisturbed, it would preserve, graven in it, so to speak, a record of the date at which it was made.

Vases are disturbed, and we cannot tell which side was north in the firing kiln, so that we cannot use the magnetic "declination," but we can make use of the dip, or "inclination."

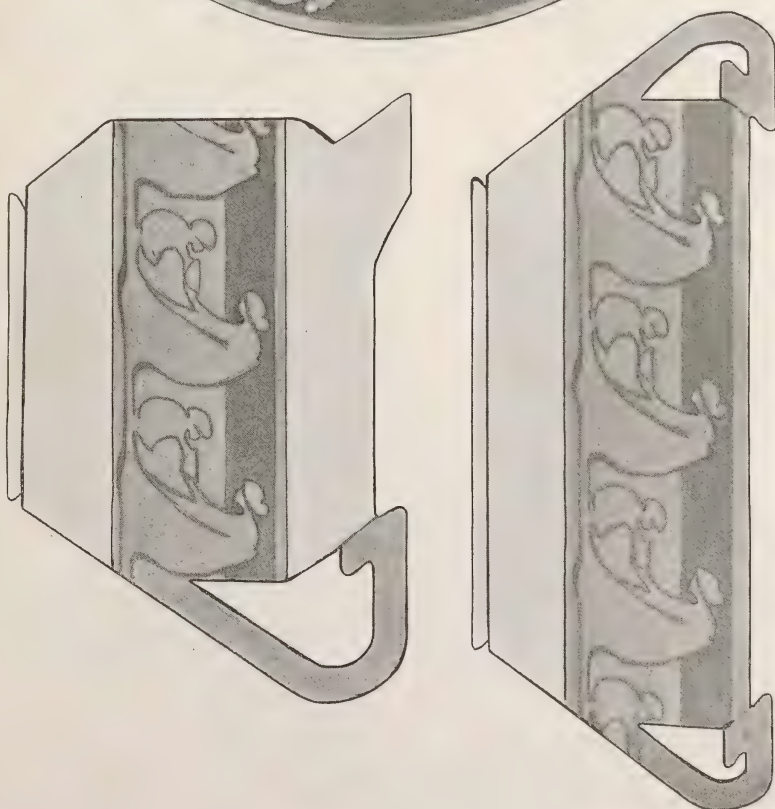
This ingenious method has been applied to vases of the Roman and Etruscan periods. The former gives a very different inclination from the latter, indicating a great difference in age, which is at least interesting and gratifying as a first result.



MULLEN

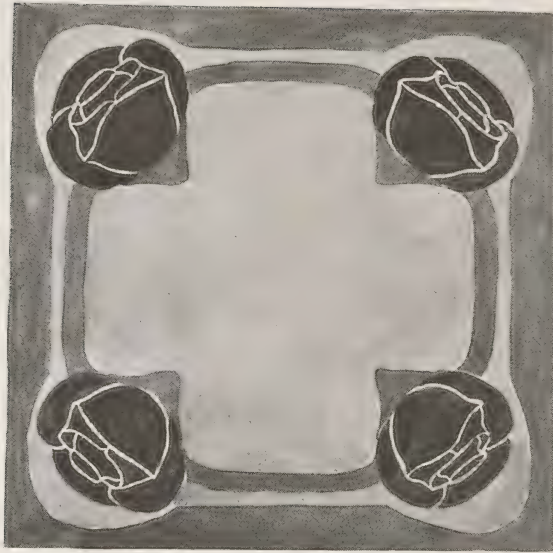
Russell Goodwin

THE mullen stalk is exceedingly decorative, the flower head a soft yellow, the leaves and stalk a light grey green. When old, the flower head is more of a mahogany shade and would be effective against a greyed peacock blue sky, softening into mahogany yellow brown and olive green.



BREAD AND MILK SET—AUSTIN ROSSER

The little figures seem most appropriate done in a soft grey blue or delft. Flat enamel with black outlines was used in the original plate, leaving the figures white, though they and entire surface of china may be tinted a very light shade of the color used. Or, use ground of deep cream, background of yellow ochre, outlining in black or gold.



FLOWER POT STAND

Margaret Overbeck

Yellow pond lily design for tile. Flower a deep yellow on a lighter ground of the same. Color balance of design in two shades of grey green.



TEA TILE

Edith Alma Ross

To be executed in blue and grey.

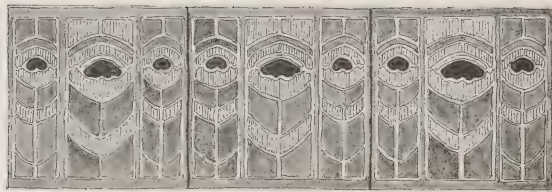


CUP AND SAUCER IN BLUE
AND WHITE
CATHERINE SINCLAIR



TOAST CUP—MISS SEGSWORTH

Darkest shade, a rich dark blue; medium shades, two tones of olive green, gold outlines.



WINDOW BOX IN TILES—PEACOCK FEATHER

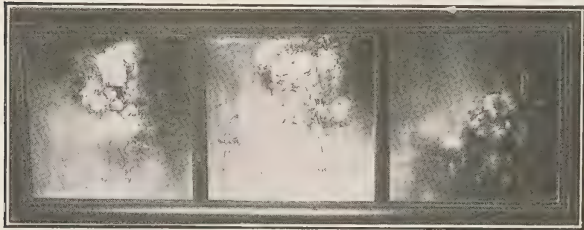
Margaret Overbeck

Eye of feather Violet with Yellow Brown above center eye of panel. The rest of the design is carried out in two shades of green, Dark Green 7 and Moss Green with Yellow added. Tint the tile with Ivory Yellow and fire before putting on the design.

STUDY OF BIRD

K. S. Sugano

This clever little sketch is by the Japanese artist, K S. Sugano, Portland, Oregon. It is executed in soft greys and browns.



FLOWER PANELS—SARA WOOD SAFFORD



STUDY OF BIRD—K. S. SUGANO



BORDER FOR FRUIT PLATE IN TWO SHADES OF GREEN—ADELAIDE ALSOP ROBINEAU



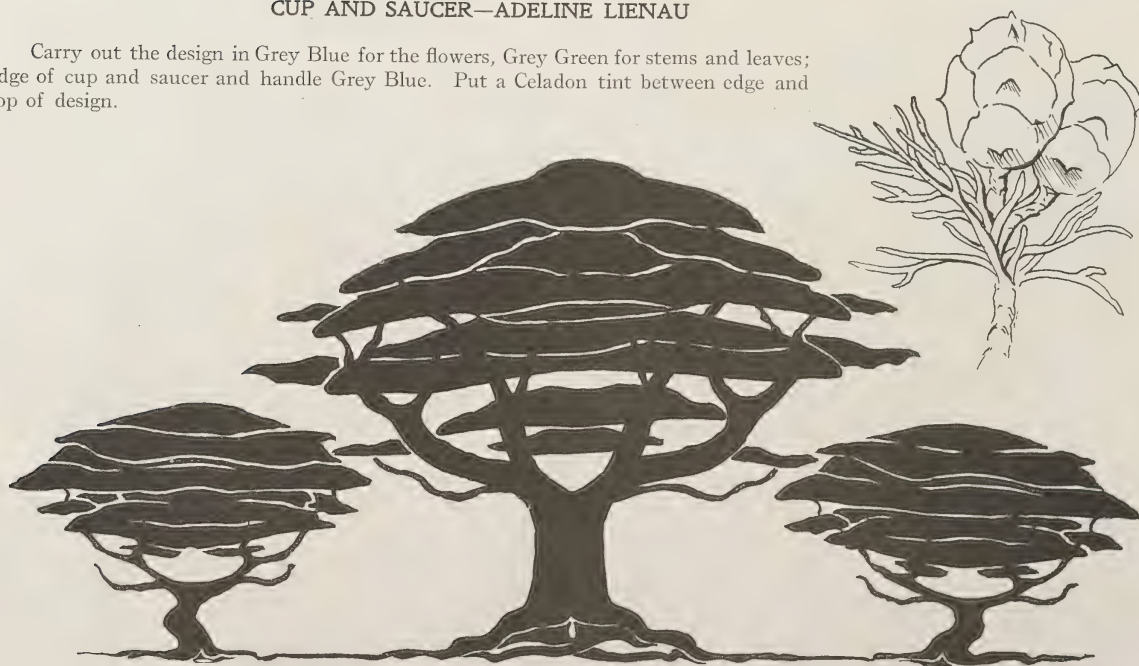
BREAD AND MILK SET—MARIE CRILLEY WILSON

Design of gold outlined in black or pompadour on a background of Fry's opal lustre. This could also be carried out in blues or greens; or, background of border dark grey blue; design grey green of a lighter tone; center of plate and lower portion of pitcher and bowl, soft grey.



CUP AND SAUCER—ADELINE LIENAU

Carry out the design in Grey Blue for the flowers, Grey Green for stems and leaves; edge of cup and saucer and handle Grey Blue. Put a Celadon tint between edge and top of design.



MOTIF OF MONTEREY CYPRESS FOR DECORATIVE USE—EDNA GAMBLE

THE CRAFTS

WOOD CARVING AND PYROGRAPHY. LEATHER AND METAL. BASKETRY, ETC.

Under the management of Miss Emily Peacock, Karol Shop, 22 East 16th St., New York. All inquiries in regard to the various Crafts are to be sent to the above address, but will be answered in the magazine under this head.

All questions must be received before the 10th day of month preceding issue and will be answered under "Answers to Inquiries" only. Please do not send stamped envelope for reply. The editors will answer questions only in these columns.

THE CRAFTS AT ST. LOUIS

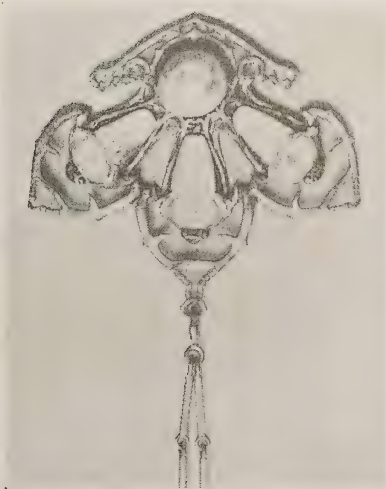
TO craftsmen one of the most interesting exhibits at the St. Louis Exposition was the jewelry, notably that exhibited in the French Section. Two long cases represented numerous jewels and ornaments, by René Lalique, Officer of the Legion of Honor, at once sculptor, painter, enameleer and goldsmith. Perhaps the simplicity that we are striving for these days is not always there, but his work shows so surely the confident hand of a master craftsman. The originality, subtle harmony of color and fearless spirit in his work are delightful. Take for instance one of the beautiful round deep collars, the one made of fine suede, with the designs cut out, and the edges embroidered in fine gold thread. The clasp was made of two panels of carved horn, colored, so that they toned with the leather, these were set in silver and also toned so that the whole was perfect harmony. Another



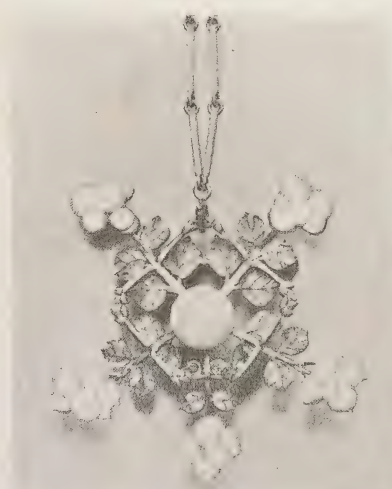
COMB—LUCIEN GAILLARD



CLASP—RENE LALIQUE
By courtesy of *The Craftsman*



PENDANT—RENE LALIQUE
By courtesy of *The Craftsman*



PENDANT—RENE LALIQUE
By courtesy of *The Craftsman*



COMB—LUCIEN GAILLARD

collar was embroidered in golden yellow shades with an enameled clasp that repeated the same notes of color and still another in amethyst tones with a clasp of gold and enamel, and from the clasp a delicately toned amethyst crystal ornament hung. Several ivory, or ivory colored horn back combs, were exquisite in their daintiness, with a rich yet quiet beauty. A simple arrangement of topaz and small diamonds were set along the tops of these combs, and underneath this narrow band setting, each comb was carved, one with a flower motive, one with lions, another with peacocks and still another with dragon flies. A tiara in green colored horn enamel and gold showed great skill and invention. The thistle motive was used, and each thistle was enameled on gold in dark blues and greens shading lighter at the top of the flower. Only those who know anything of enamels and the difficulty surrounding this work could appreciate these marvelous results. We hope to have more illustrations of M. Lalique's work later.

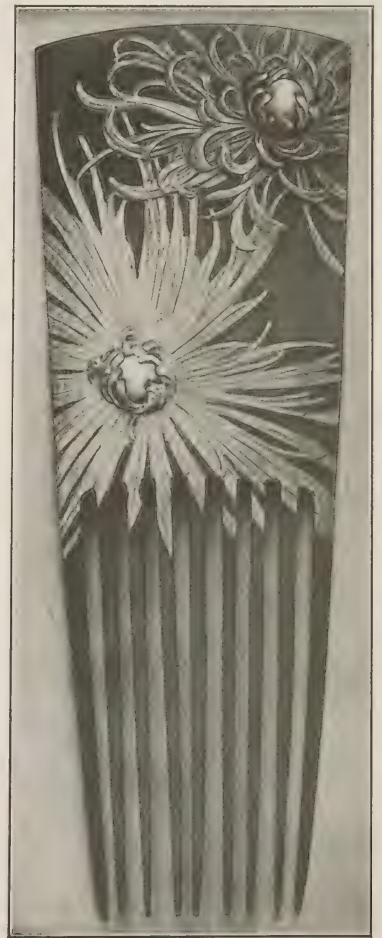
The work of Lucien Gaillard was of the greatest interest, it is very original, harmonious and extremely refined. A pocketbook was especially beautiful in gold and enamels. The wheat motive was used in the design for the front part and this was enameled in pale yellows and green. The clasp was made of a large amethyst set in gold, the handle was of ivory with a moth enameled in green and black on gold.



COMB—LUCIEN GAILLARD

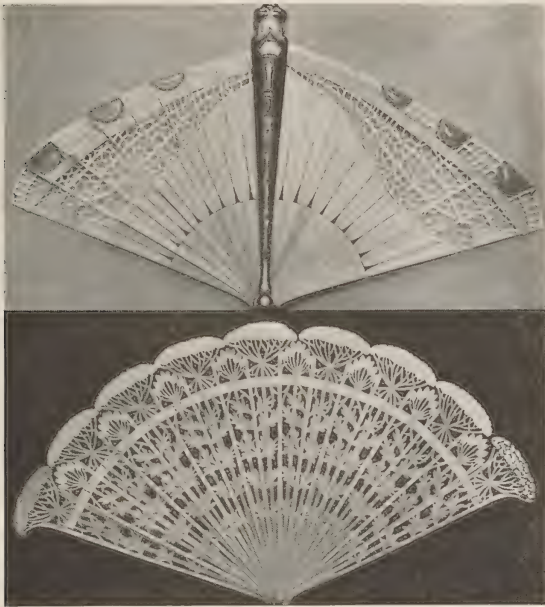


COMB—LUCIEN GAILLARD

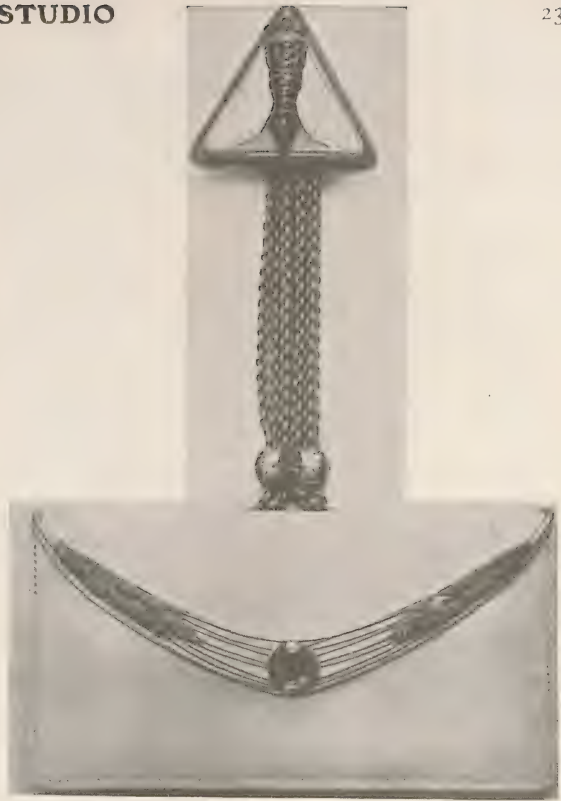


COMB—LUCIEN GAILLARD

Beautiful chains made of long gold links enameled, were unusually fine. Like Mr. Lalique, M. Gaillard uses carved and colored horn, in connection with his enamels and precious stones. The accompanying illustrations will give readers a good idea of this craftsman's work.



FANS—LUCIEN GAILLARD.



POCKETBOOK—LUCIEN GAILLARD



PENDANT

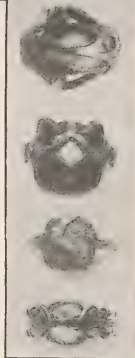
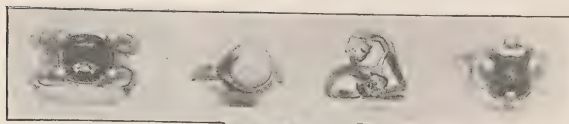
COMB AND BROOCH

LUCIEN GAILLARD

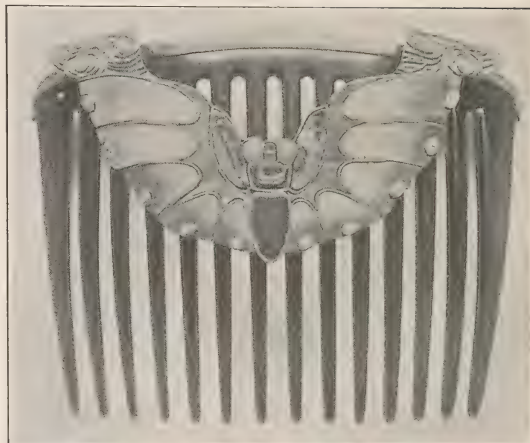
PENDANT



COMB—LUCIEN GAILLARD



RINGS—CHARLES RIVAUD



COMB—CHARLES RIVAUD

Charles Rivaud exhibited an interesting collection of rings and two necklaces, one in gold and pearls and one in gold and rubies. Several examples of his able and unique work are illustrated.

Unfortunately we were unable to secure photographs of the very pieces exhibited at St. Louis by either Mr. Lalique, Mr. Gaillard or Mr. Rivaud.



NECKLACE AND BRACELET—CHARLES RIVAUD



PENDANT—CHARLES RIVAUD

ANSWERS TO INQUIRIES

Mrs. W. E. Francis—F. W. Gesswein Co., 39 John street, New York, can furnish you with tools for metal work.

E. W. R.—Use Devoe's oil stains, and for a good green, use walnut stain first for dark effects; when dry, use antique oak, and lastly malachite green. After standing for several hours the wood should be well rubbed, so as to take off all superfluous stain. Make a mixture of wax and turpentine and apply while warm; let this stand a few hours, then rub well with soft rags.

A. K. T.—Fourteen carat gold is very hard to work. Eighteen carat is very much easier and the color is so much better also.



TREATMENT FOR PINK ROSES (Supplement)

Rhoda Holmes Nicholls

THIS study of Roses can be used for the decoration of china as well as for a study for water color painting. The roses are painted in flat modelling to make them more adaptable for decoration. In copying them, it is important to keep the masses simple, light against dark and dark against light, the flowers forming the light masses and the leaves the dark. The roses are broken with deeper tones and the leaves with light to divide the masses without disturbing the balance. The study is painted on 90 pound paper (Whatman). The colors used are: Hooker's Green No. 2, Aligarh Crimson, Raw Sienna and Indigo for the leaves; Rose Madder, Vermilion, Cobalt Blue and Indian Yellow for the roses. For the stems use a little Emerald Green and Lemon Yellow with Hooker's Green No. 2. The background is painted with Indigo, Brown Madder and Raw Sienna.



INTERESTING POTTERY RELICS DISCOVERED

EXCAVATIONS in the plain of Graufesenque, near Milan, in the south of France, have recently brought to light the remains of a Roman pottery of large extent and one which from the marks on ancient vases, etc., in numerous museums, must have supplied the whole of Roman Gaul with ceramic ware. In addition to a variety of interesting relics, says the *Revue Archeologique*, the factory books were also found, these consisting of glazed clay tiles on which the necessary entries were made with some pointed instrument. Seven of these tablets have been discovered, in size from $7 \times 4\frac{1}{2}$ to 7×9 inches, and containing entries in three columns by an unskilled hand. The first column gives the names of the workmen, the second the class of goods produced and the third the number of each delivered.

One of these names is that of Momo, who seems to have

been a very skillful hand, since ware bearing his stamp has been discovered in Pompeii. The works seem to have flourished between the years 50 and 70 A. D., and to have done business on a large scale, no less than 9,000 pieces of one kind having been made by Momo, whilst other workmen turned out between 300 and 1,400 pieces each. The names of the ware are given, a circumstance which will facilitate the proper naming of many Roman articles already in museums.—*From China, Glass and Pottery Review.*



ANSWERS TO CORRESPONDENTS.

K. A.—Try alcohol to thin your oil of lavender if too heavy. Hard or unfluxed gold can be used only over fired color or raised paste. Brushes and palette knife should always be cleaned in changing from one kind of gold to another. It will be a difficult problem to modify a "fierce jonquil yellow ground with a blood red design." We would suggest outlining the design in black and covering the yellow ground with fine dots of white enamel. No, flowers cannot be painted with the sugar and water mixture, it is only useful for black outlines in powder color. We cannot go into the manufacture of colors in our magazine, better look up the subject at a library.

S. J.—Silver always tarnishes more or less, but can always be cleaned like other silver. The dull colors of which you speak are mat colors and are dusted on the same as powder color, a second coat can be put on if necessary. You will find directions for dusting in many back numbers of *KERAMIC STUDIO* Answers to Correspondents. We do not know of a good colored study of cherries but hope to publish one soon.

C. W.—The color studies given with the *KERAMIC STUDIO* can be executed in any make of colors, usually the treatment given with the study advises the make of color the artist used, but it is always possible to substitute other makes. We have still a few copies of the Lacroix color chart which we give to any subscriber who writes enclosing two cents postage. Lacroix Ruby is the best of that make for dark red roses. Certainly other makes of color can be used with Lacroix; Rose Pompadour of Lacroix is often used for pink roses.

M.—It is not necessary to fire in the exact time given in directions for the kiln. The draft conditions in every place are different, while each individual kiln will have its own peculiarities. Never use enough oil to overflow or to cause heavy smoke from the chimney, there is no advantage in a rapid fire. You will have to try the dampers and see which arrangement will give the steadiest flame and the strongest roaring sound, a good strong "roar" should always be heard with a good draft. A damper in the pipe is of use only to make a slower cooling off, which is better for the kiln. The damper is turned only when the oil is burned out. Smoke from the chimney always indicates that you are using more oil than the combustion will consume, shut off your flow of oil a little. The heat comes only from the oil consumed which makes no smoke, any more oil not only is useless for heat purposes, but clogs the kiln and chimney with soot. Muffles always separate so that the cracks have to be refilled frequently, this will not affect the firing.

A. E.—Yellow lustre over orange lustre will prevent it from rubbing off. Lustres cannot be used in enamels. Many good dark purples are sold in powder color—Royal Purple, Panzy Purple, etc.,—write to the artists who sell colors.



KILNS—FREDERICK H. RHEAD

FOR ALL DESIGNERS

A HANDBOOK OF PLANT-FORM

FOR STUDENTS OF ART DESIGN, ART
SCHOOLS, TEACHERS & AMATEURS

ONE HUNDRED PLATES,
COMPRISING NEARLY 800 ILLUSTRATIONS

Drawn and Described, and with
AN INTRODUCTORY CHAPTER ON DESIGN
AND A GLOSSARY OF BOTANICAL TERMS

BY

ERNEST E. CLARK

Art Master Derby Technical College, National Silver
Medallist in Ornament and Design.

LARGE 8vo.

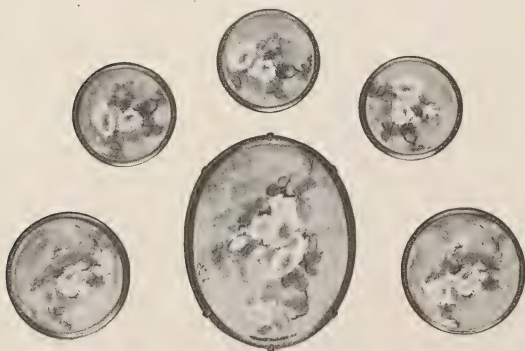
\$2.50 NET

John Lane Send for Art List 67 8th Ave. New York

MINERAL TRANSFERS

FOR CHINA DECORATION IN ALL ITS BRANCHES

SPECIMENS OF BUTTON DECORATION.



PALM, FECHTELER & CO.

80 FIFTH AVE., NEW YORK. 45 LA SALLE ST., CHICAGO. 1ST NATIONAL BANK., EAST LIVERPOOL, O.

APPLY TO YOUR SUPPLY HOUSE FOR
SAMPLES AND INFORMATION.

**ARTISTS'
SUPPLY CO.**
1009 Chamber of
Commerce
CHICAGO... ILL.

Save Time!!—and Money!!

**Artists' Materials, All Makes
at Lowest Prices.**

Mail Orders a Specialty. Write for Catalogue No. 5.

Emily F. Peacock
Worker in Metals. Enamelling.
The Karol Shop,
22 East 16th Street, New York.

Yes, we handle

MARSCHING'S ROMAN GOLD

and like to sell it because we know it to be the best.

C. C. LOWELL, Worcester, Mass.

FREE-- A Beautiful Flower Study with every
50 cent order for

China Painting Materials

Discounts to Teachers.

Send for Art Catalogue.

ERKER BROS. OPTICAL CO.,

608 Olive Street,

ST. LOUIS.

White China for Decorating.

D. & Co.

FRANCE.

IF YOU WANT QUALITY,
The Best SHAPES,
RESULTS in Firing.

USE THIS MAKE OF CHINA.

New Catalogue just issued, will be sent on application. Goods must be ordered
through nearest local dealer.

SOLE AGENTS FOR THE UNITED STATES.

Endemann & Churchill,

50 Murray St.,

New York.

KEEP THE FIRE ALIVE

KERAMIC STUDIO

CONTRIBUTORS

MISS MARY BURNETT ♀ ♀ ♀ ♀
MRS. K. E. CHERRY ♀ ♀ ♀ ♀
MR. HUGO FROEHLICH ♀ ♀ ♀ ♀
MISS MAUD E. HULBERT ♀ ♀ ♀ ♀
MR. W. P. JERVIS ♀ ♀ ♀ ♀
MR. LAURIN H. MARTIN ♀ ♀ ♀ ♀
MRS. MARY ALLEY NEAL ♀ ♀ ♀ ♀
MR. J. VAN NORDAN PECK ♀ ♀ ♀ ♀
MR. F. H. RHEAD ♀ ♀ ♀ ♀
MRS. BLANCHE VAN C. SCHNEIDER ♀ ♀ ♀ ♀
MISS JEANNE M. STEWART ♀ ♀ ♀ ♀
MRS. BELLE BARNETT VESEY ♀ ♀ ♀ ♀



MAR, MCMV Price 35c Yearly Subscription \$3.50

A MONTHLY MAGAZINE FOR THE POTTER AND DECORATOR

[The entire contents of this Magazine are covered by the general copyright, and the articles must not be reprinted without special permission.]

CONTENTS FOR MARCH 1905

	PAGE
Editorial	237
Brush Work	W. P. Jervis and F. H. Rhead 238
Tankard—Swedish Gooseberries	Jeanne M. Stewart 239
Decorations for a Cup and Saucer from a Cicada Motif	Hugo Froehlich 240-250
Pine Cones	Maud E. Hulbert 250
Louisiana Purchase Exposition Ceramics (continued)	251-252
Bowls in Blue and White	J. Van Nordan Peck 252
Peaches	Mary Burnett 253
Trailing Arbutus	Blanche Van Court Schneider 253
League Notes	Belle Barnett Vesey 254
Freesia	K. E. Cherry 255
The Crafts—The Art of Enameling on Metal	Laurin H. Martin 256
Mirror Backs in Metal and Wood	257
Answers to Inquiries	258
Studio Notes	258
Answers to Correspondents	258
Thistles (Supplement)	258

BRUSH & PENCIL

An International Illustrated Magazine of Fine and Applied Art. Published in America for American People

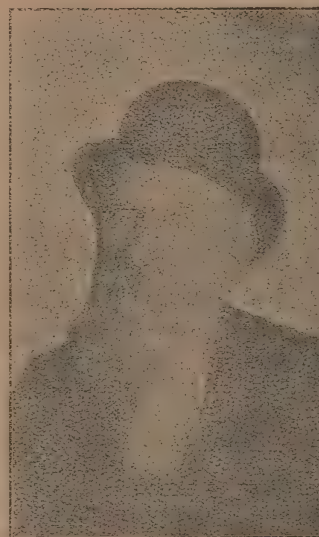
BRUSH AND PENCIL during the year 1905 will maintain its high standard as the chief exponent of American Art and art interests. It will, moreover, include the best artistic work of the Old World..... The Magazine is in its fifteenth volume. It is now recognized as THE art publication of America. Its growth and development are sufficient evidence of public opinion as to its value in the past, and it is the publishers' aim to make it in the future indispensable to all who wish to keep abreast of the times in art matters.

Annual Subscription, \$2.50

Single Copies, 25 cents

THE BRUSH AND PENCIL PUB. CO.

111 East 23rd Street, New York
215 Wabash Avenue, Chicago



This man who has already caused us so much trouble by taking subscriptions and pocketing the money, is again reported as "out of jail and doing business." **LOOK OUT FOR HIM!**
We are not responsible for his acts!

KERAMIC STUDIO PUBLISHING CO.

WHEN WRITING TO ADVERTISERS PLEASE MENTION THIS MAGAZINE

KERAMIC STUDIO

Vol. VI, No. 11

SYRACUSE, NEW YORK

March 1905



THE results of the first monthly competition have been unusually gratifying. The work was far above the average and the really uninteresting efforts much in the minority. We have the benefit of the criticism of Mr. Hugo Froehlich on the entire competitive work as well as his decision in regard to the distribution of prizes and mentions.

We have devoted a large portion of this number to the designs from the Cicada, given in miniature as illustration to the invaluable criticism of Mr. Froehlich and as an object lesson in design.

It will be readily understood by our contributors, that it would be impracticable to purchase so many designs from the same motif. Therefore, the KERAMIC STUDIO announces that the monthly competitions will be held with the understanding that with the exception of prizes and mentions, no designs will be purchased, but if needed to illustrate a lesson on design from Mr. Froehlich they will be reproduced in miniature and the originals returned to owners. The names of designers will be given when the criticism is favorable, otherwise the names will be omitted.

Hereafter no design will be considered for a prize if unaccompanied by at least a section executed in color.

In this respect we wish especially to commend the work of Miss Sabella Randolph. Every design was neatly and carefully executed and accompanied by a water color sketch of the cup giving unusually good and refined color schemes.

The prizes were awarded as follows:

First prize—Miss Austin Rosser, Butler, Missouri.

Second prize—Miss Sabella Randolph, Alfred, N. Y.

Second prize—Miss Ophelia Foley, Owensboro, Kentucky.

1st mention—Miss Mary Overbeck, Cambridge City, Ind.

2nd mention—Miss Hannah Overbeck, Cambridge City, Indiana.

3rd mention—Miss Sabella Randolph, Alfred, N. Y.

4th mention—Mrs. Martha Dinsmore, Enfield, New Hampshire.

5th mention—Miss Minna Meinke, Rockville Center, Long Island.

6th mention—Miss Mary Overbeck, Cambridge City, Ind.

7th mention—Miss Maud Meyers, Auburn, N. Y.

The N. Y. S. K. A. will hold its annual exhibit in the galleries of the National Arts Club from April 19th to May 2d. American pottery and porcelains will be shown at the same time and it is hoped and expected that this will be the most interesting affair yet given by the Society.

It is gratifying to note that the New York Society has taken the initiative in holding an exhibition which is not primarily a sale. Numbers but no sale prices will be marked on the pieces exhibited, although anyone wishing to purchase can receive information at the office of the National Arts Club.

The work will be very carefully selected in order that the National Arts Club may feel that it has admitted to its galleries a craft worthy of respect and admiration.

The problem of the July competition, closing May 15th, will be a study of some Spring flower. In these studies, careful note must be made of the balance of masses, spacing, harmony of beauty, arrangement of dark and light, as explained by Mr. Hugo Froehlich in his articles on design in KERAMIC STUDIO. These studies should be made in India ink, wash drawing, accompanied by details in pen and ink, and treatments for mineral or watercolors or both. First prize, \$8.00; second prize, \$5.00. It is to be hoped that the lovers of the naturalistic will make a more earnest effort than they did for the April competition just closed.

+

The National League has been well represented in the sales made at the St. Louis Exposition. According to the official lists the following direct sales were made for members of the New York, Chicago and Kansas City clubs. Subsequent sales also must be understood as resulting. This should be a great encouragement to those desiring to raise the standard of work exhibited and especially to those demanding strict juries and high class exhibitions as in the case of the New York Society exhibiting next April at the National Arts Club. It is no easy matter to give up a life long style of decoration and one that has been found lucrative, but in the end the New York Society will find itself repaid in every way.

SALES AT ST. LOUIS EXPOSITION.

New York Society:—

Marshal Fry—Tea jar with cover, pottery.

Anna B. Leonard—Tea set, ladles, overglaze decoration.

Adelaide A. Robineau—Two vases, porcelains.

Charles Volkmar—Vase and cider set, pottery.

Chicago Societies:—

Eva E. Adams—Mayonnaise Bowl, overglaze decoration.

Mable C. Dibble—Soki Pot, overglaze decoration.

Beulah L. Frazer—Milk Pitcher, overglaze decoration.

Kansas City Society:—

Laura Ward Fuller—Vase, overglaze decoration.

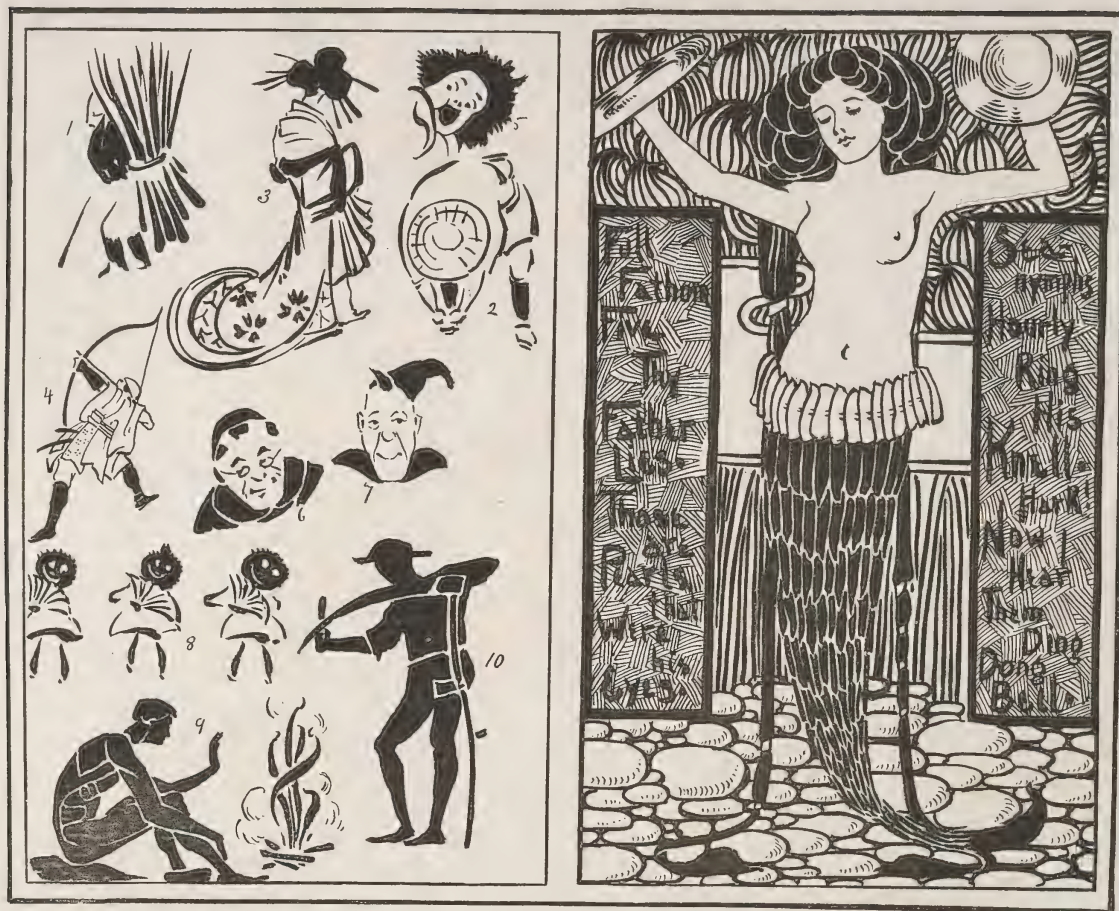
Mrs. A. J. McDonald—Vase and plate, overglaze decoration.

+

The March issue of KERAMIC STUDIO has been somewhat delayed by a fire in our office building, which although not as disastrous as it might have been, was severe enough. The loss consisted of a large number of magazines and studies spoiled by water. We regret to say that the stock on hand of the February issue has been more or less damaged and that this number will soon be out of print, also that many Rose Books have been destroyed, and as the issue of these Rose Books was limited, and they are in good demand, it will probably be exhausted before long. A revised list of back numbers will soon be issued for the benefit of those who desire to complete their files.

+

We are beginning to prepare a "Book of Fruit," which will appear next fall and contain the best fruit designs published in KERAMIC STUDIO, besides a number of new studies. Among the latter are two fine panels of Apples and Oranges by Miss Maud Mason.



[BRUSH WORK

W. P. Jervis, and F. H. Rhead

LESSON VIII. FIGURES

THE illustrations to this lesson are intended only as a few simple examples to show the different methods of drawing with the brush. It is well known what wonderful figure drawings the Japanese produce on a few strokes. However few these may be, however broad and sketchy they are, their figures always convey the idea of life and motion. This goes to prove their strict observance of nature. You are in a fair way to know a foreign language when you *think* in that language. The Japanese with wonderful dexterity can draw about as fast as they can think, and they think what they draw. Keep your eyes open and observe carefully, for otherwise it is impossible to retain impressions of things seen during the day and equally impossible to draw them. Ask any artist friend, or try yourself, to draw a person walking. It will be found no simple matter to correctly indicate the swing of the body, the poise of the head, the position of the arms, if you have not noticed very carefully indeed, these by no means little details. It is all a question of the old story of Eyes and no Eyes, or the sense of seeing. A Japanese will jot the walking figure down almost as quickly as you can sign your name and one shall be as legible as the other. Nos.

2, 3 and 4 are examples in point; Nos. 6 and 7 are good practice for facial subjects. The other examples are merely suggestions.

The Sea Nymph panel, if done in underglaze colors, would look well with a background of light green with the side panels in purple and black lettering. The figure should be a paler green than the background; the tail a dark warm green. The pebbles should be in russet brown; stems of leaves in crimson, the leaves themselves in a warm dark green. The hair should be light red and the cymbals in a rich yellow, the whole panel being outlined with a strong black line. The subject is also suitable for pyrography.

Primarily intended to encourage the study of form and to express the same in the easiest possible method, with a brush, more particularly in the young, these notes have been written with an entire absence of technical terms and it is hoped with a simpleness and directness that all may understand. There is much more to teach and to be learned about brush work than is even hinted at in these primary lessons, but if the student has carefully observed the examples and instructions and if moreover he has supplemented these examples by others made by himself, we think a certain faculty of expressing his thoughts will have been obtained, impossible under any other system of tuition. It would be interesting to see examples of what has been acquired, especially from those who had no previous knowledge of drawing.



TANKARD IN SWEDISH GOOSEBERRIES—JEANNE STEWART (Treatment page 252)

DECORATIONS FOR A CUP AND SAUCER FROM
A CICADA MOTIF*Hugo Froehlich*

A REALISTIC



B SEMI-REALISTIC



C DECORATIVE



D DECORATIVE



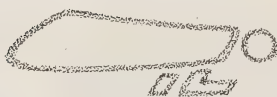
E DECORATIVE



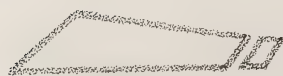
F DECORATIVE



G SYMBOLIC



H SYMBOLIC



J ABSTRACT

THE designs submitted for the March competition have proved a pleasant surprise. Not only is the quality of much of the work far above that shown in previous competitions, but nearly every design sent in showed an intelligent use of a cicada motive, and a growing appreciation of the principles which underlie the treatment of natural forms, when applied in decoration.

The cicada is what is commonly known as the locust, an insect familiar to all, and its various "views" are of such characteristic and interesting shape as to afford suggestive material to the designer. Even such minute parts as the leg, the antennae, the head and the wing were taken as themes upon which many variations were played, resulting in designs of much interest, though differing widely in originality and handling. The fact that the workers were limited to motifs found in one insect may account for the unusual excellence, as a whole, of the designs sent in. It is always best to set ourselves a limit,—to work within certain restrictions, if we would develop our inventive powers, and secure a simple and restrained effect. It is never well to use too much material in a design. "Ringing the changes" upon some simple idea is a surer way to success.

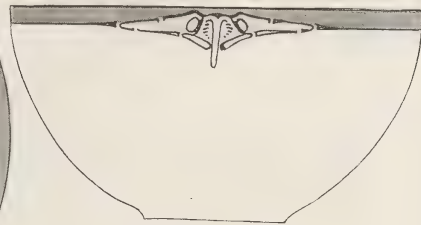
In selecting animal or plant forms we may proceed by steps from the realistic to the semi-realistic treatment, then to the decorative, then to the symbolic and lastly to the abstract. This progression is illustrated in the group of sketches from A to F. Sketch A shows the realistic treatment—the insect is pictured just as it appears; the setting of the wings, eyes and legs are true to the life; the gauzy texture of the wings differing from the horny firmness of the legs and the protecting armor of the body; these qualities are shown by means of the technique employed. But this pictorial treatment is not the treatment we should use, when we seek to adapt a natural form to design. It is by omitting unnecessary details, by carefully adjusting all parts to suit some purpose, that all animal and insect forms can be developed into design units. It is true, however, that some forms are in themselves more decorative than others, and can therefore more easily be adapted to design, those forms having a certain musical line quality—that is, a quality affecting the eye as a strain of music affects the ear. Experience and taste are necessary in even the selection of a motive.

In sketch B the unnecessary parts have been to some extent rejected, and the line quality suggested in the realistic drawing of the insect has been emphasized, so that while none of the truth of growth has been sacrificed, the decorative quality appears plainly. Under this treatment, the motive can be used in many kinds of designs, but it would hardly be suitable for a cup and saucer. Even a semi-realistic treatment of an insect is unpleasant in its suggestion, when applied to any article used upon a dining table. Some people do not feel this prejudice to realism when plant forms are employed, but the offense to the principles of design are no less manifest, when a realistic clover blossom or violet is painted on a tea cup. Fitness to the purpose should be the criterion, in all design.

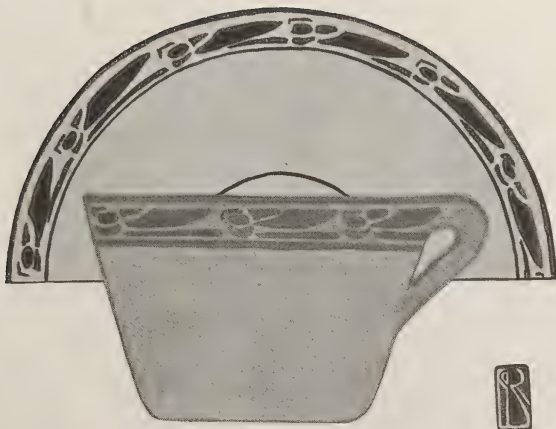
Sketches C, D, E and F are all decorative interpretations of the cicada. The origin of the motif is apparent in each, but the realistic elements have been very much subordinated. In these sketches, the design thought is uppermost, and manifests itself at once, although in each of them enough of the spirit of the insect is kept to afford one who seeks for the



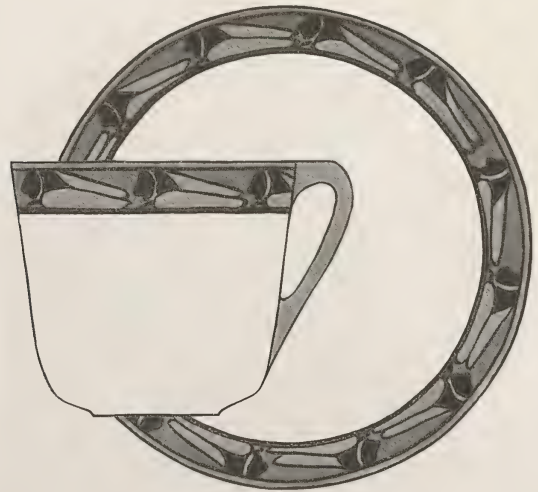
No. 2. First Prize, Miss Austin Rosser.



No. 1. First Prize, Miss Austin Rosser.



No. 4. Second Prize, Miss Sabella Randolph.



No. 3. Second Prize, Miss Ophelia Foley.



No. 14. Sabella Randolph.



No. 15. Sabella Randolph.



No. 16. Sabella Randolph.



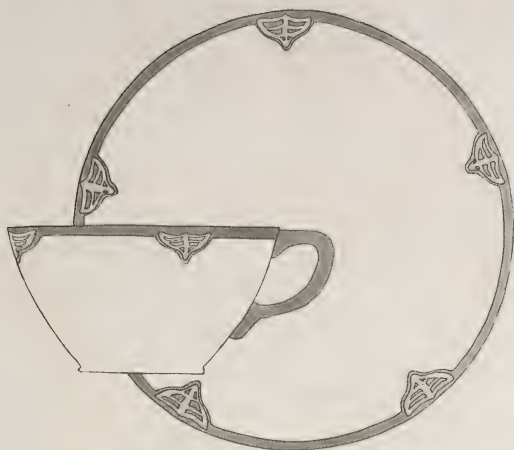
No. 17. Sabella Randolph.



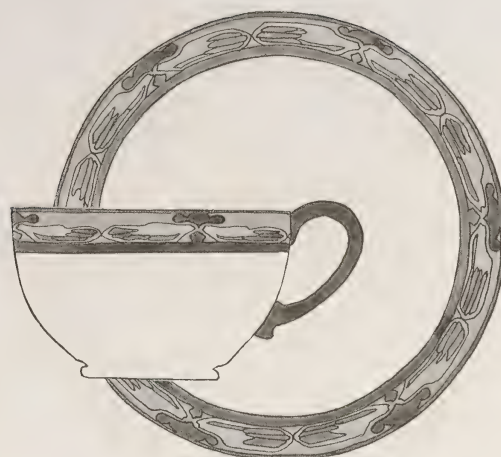
No. 18. Sabella Randolph.



No. 19. Sabella Randolph.



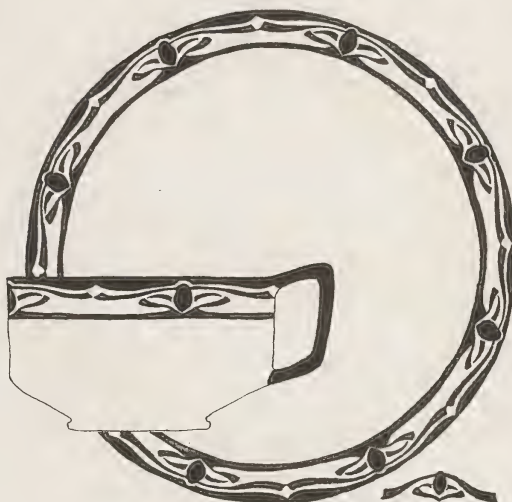
No. 5. First Mention. Mary Overbeck.



No. 10. Sixth Mention. Mary Overbeck.



No. 7. Third Mention. Sabella Randolph.



No. 6. Second Mention. Hannah Overbeck.



No. 9. Fifth Mention. Minna Meinke.



No. 11. Seventh Mention. Maud Myers.

source of the motif the pleasure of discovery. These four units also show different ways of planning a motive; in C the decorative lines of the insect are utilized; in D the shape is simplified, and covered with a flat tone of grey—a band of darker grey bounding the shape; in E a band of darker grey is put outside the shape employed, leaving a pathway of white between the band and the shape; in F the parts have been separated, as in a stencil, allowing pathways of white or of the background tone to traverse the unit; both E and F tend to loosen the design, because these pathways carry the background tone into the unit without destroying its mass. G and H are symbolic. We can still trace a resemblance to the insect, but we feel that a slight readjustment of parts would destroy all traces of a likeness, making the unit an arrangement of abstract shapes. Even a form so abstract as J might be called a symbol, but it is scarcely recognizable as being taken from the cicada. Just how far the identity or source of a symbol ought to be kept is an interesting question. It is true that we feel an added interest in a design when we can trace its origin, although the symbols employed by American Indians by no means bear this out, for the same symbol frequently has many meanings, and is capable of many interpretations. The beauty of many of the Indian designs lies in the simplicity of their lines, and in the evident restraint with which they were used. The typical Indian uses no unnecessary words in his speech. His communications with his fellow man are as yea, yea, and nay, nay. Something of this terseness and severity appears in his ornament. It may be severely simple, but it is dignified and strong.

This evolution of a design unit shown in the group of sketches from A to J, is what is usually understood as conventionalizing, and it is along this line that many of the designs submitted in the competition have succeeded. Nos. 1 and 2 show imaginative power, as well as much originality in the treatment of the motive; the design sense is also strongly expressed. The shapes are refined and of good proportion, and the designs are so managed as to produce balance. All of the parts are well planned—not only the parts of the design itself, but the empty or undecorated spaces are big, simple areas of good shapes. The design is therefore well balanced on the object. The feeling of restraint is especially apparent in No. 1. There seems to be very little material used in this design, yet it is "just right." It has a silvery quality, while No. 2 demands a richer, fuller color scheme. All of the sketches sent by this artist—Nos. 1, 2, 12 and 13—have a delightfully workmanlike quality.

In some of the other sketches, amateurish technique overshadowed the merit of the design. Many of the cup shapes are poor, and some of the handles are quite impossible, but as the conditions of the competition did not include constructive design, defects in those particulars were not considered.

No. 3 shows, in three tones, a simple, unique treatment. The width of the border as compared with the rest of the cup is well planned. The design does not interfere with the material of the object and the purpose for which it is to be used. It is a matter of regret that all of the designs were not done in two ways: one in black and white (or greys), and the other in the colors intended for the carrying out of the design. To imagine what the effect of some of these designs in strong contrasts of black and white would be in soft color schemes, required a great stretch of imagination. The sketches were judged, however, not from the "black and white" point of view, but from an imaginary color scheme, that would afford the design all the assistance possible.

Sketches 4, 7, 14, 15, 16, 17, 18 and 19, are the work of one artist, and show the versatility and imagination of the

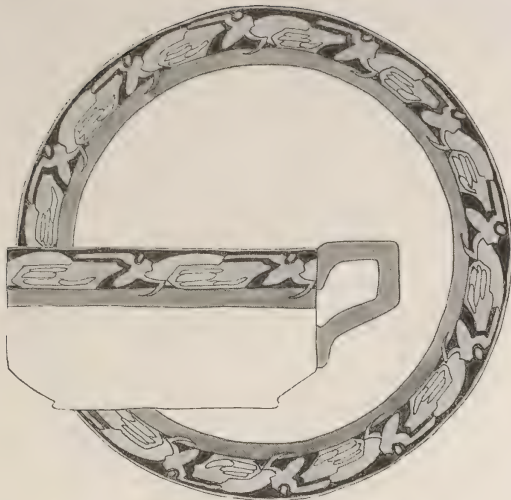
true designer. To be able to invent from one motif so many arrangements, and by proper application to produce so many good designs, indicates power and thorough training. It is a pleasure to see such work. While there is a difference in the degrees of excellence which these sketches show, all of them are meritorious. In dignity, invention and application, No. 4 seems to lead. Compared with No. 16 of the same group, there is an indefinable something that gives No. 4 the preference. No. 16 is vigorous, well thought out, and well composed; but a set of dishes decorated with this design would look heavier and less refined than a set decorated with No. 4. No. 7 is a delightful rhythm made from the leg of the insect as a motive; it is well spaced, making a good effect of dark and light. In No. 15 the invention is good, but the design is not sufficiently simple; this is especially true of the saucer, where the complexity of the line movement thrusts itself unpleasantly forward. A design should be so simple or so well arranged as to its line and its masses of dark and light color that the eye accepts it with an agreeable sensation. For this reason, No. 14 is a better design than No. 15, but it is not so good as No. 4. Nos. 4, 14 and 15, are especially creditable, because of the unity between design and object; the eye takes in, agreeably, the whole idea, and a sense of fitness, utility and beauty is at once established.

In No. 17, the cup design does not harmonize with the design on the saucer. On the cup, the unit is well placed and well related, but is somewhat too realistic in its treatment. No. 18 shows a very original treatment of the motif; the border on the saucer lacks, somewhat, in restfulness; nor do the vertical stripes on the cup add to the beauty of the design; it would be an interesting experiment to make both borders narrower.

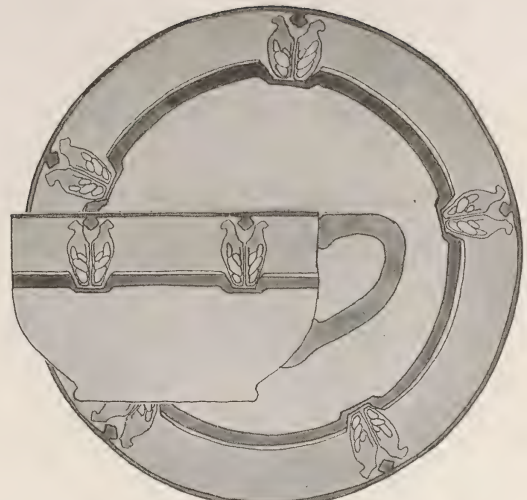
No. 19 is well handled; here a carefully planned color scheme would be essential to the success of the design; better workmanship would add materially to the effect of this series of drawings.

In the series numbered 5, 10, 20, 21 and 23, we have another set of designs in which the creative faculty has been very active. In the previous set (Nos. 4, 7, 14, 15, 16, 17, 18 and 19), the identity of the cicada was preserved, while in this set the artist has used the parts of the insect merely as suggestions, and from these has developed abstract shapes. The shapes have been so adjusted as to make good rhythms, No. 5 being the most successful of these arrangements, largely owing to a certain restraint that has been exercised in the use of the motif. The result is simple, dignified and complete. No. 10, while lacking somewhat in simplicity, holds together well, and there is a good balance in the width of the border, compared with the undecorated areas of the cup and saucer. The design applied to the cup is better than that on the saucer, because the wing shapes are smaller. In No. 20 a wider band on the edge of the saucer and on the top edge of the cup would be better. This design is not so interesting as the design of No. 22 because in the latter a better unit is used. A carefully selected color scheme would be necessary to successfully carry out the design of No. 22,—one that does not show strong contrasts of hue, nor of dark and light. No. 21 is very rich in its tonal effect, and holds together very well, in spite of its many complex shapes. This is an instance showing complexity and unity well managed. No. 23 is the least successful of this group, because the five units in the border of the saucer are too prominent; they disturb the balance of the whole. The sketches in this group, also, would be greatly enhanced by better workmanship.

Nos. 6 and 24 are both interesting; they, too, deal with abstract shapes evolved from the cicada, and show good in-



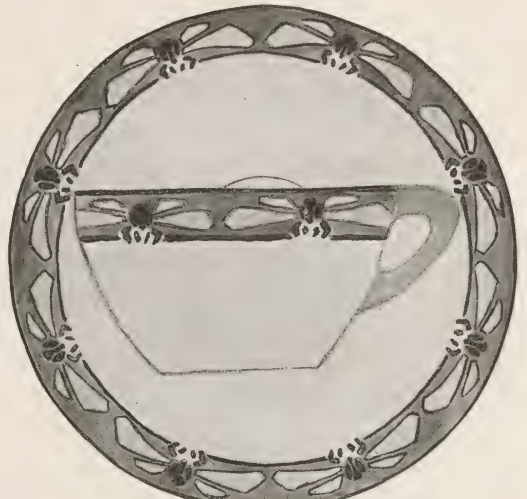
No. 21.



No. 23.



No. 33.



No. 31.



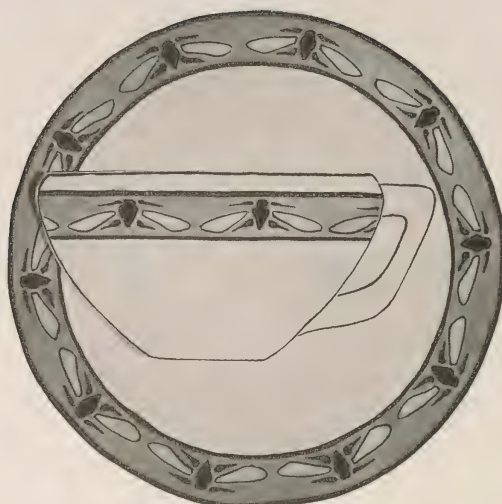
No. 34.



No. 35.



No. 46.



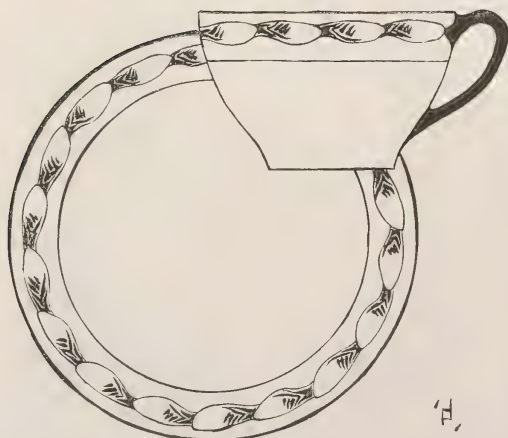
No. 47.



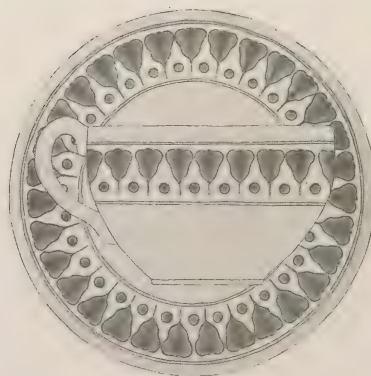
No. 48.



No. 49.



No. 8. Mrs. Martha Dinsmore, fourth mention.



No. 51.

vention, and a good feeling for balance. No. 6 is the better of the two, because its flow of line, and its arrangement of dark and light shapes give an arrangement that is more unusual and at the same time more beautiful than No. 24. Let us remember that because a design is unusual it is not necessarily fine. It may be very unusual and at the same time be very bad. In these two sketches it is impossible to say wherein one is finer than the other; we only know that one satisfies the taste and judgment more fully than the other, just as in the rendering of a piece of music, two artists may play it well, but one will give it an interpretation in some intangible way, that pleases more than that given by the other.

No. 8 shows an arrangement of the wing motif in a rhythm; it is simply done, and makes an effective design.

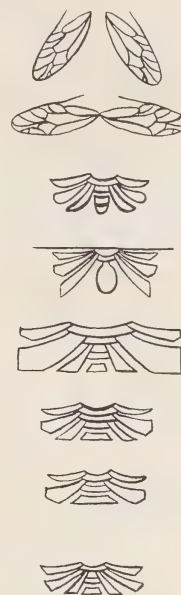
No. 9 is excellent in design; to plan a border in rectangular shapes, and to compose within each rectangle some unit that comfortably fills it, is one way of arriving at a good result. Triangles, circles and squares can be managed in a similarly effective way. In No. 9 the little pathways of the background carried through the wings and body of the motif seem to echo and support the larger areas of the background, without destroying the masses of the unit. Without these pathways the design unit would be too solid. As it appeared in the sketch, the color was too heavy, and the shape and treatment of the design made a rather clumsy effect. The cup design would be better without the zig-zag shape attached to the border in each panel.

In No. 11 the leg motif is cleverly managed, showing originality and a good balance of dark and light masses. The same might be said of No. 25, although this design differs from No. 11 in being delicate and rather silvery in tone, owing to the distribution of light and dark masses. If the dark masses are closely packed the effect is low-toned and tends toward a heavy but rich result. If the light areas dominate and the dark ones are small and well distributed the design assumes a light or silvery tone. When the light and dark masses are of about the same quantity, and evenly distributed, a medium tone results. Good designs can be made in all three effects.

No. 26 is an interesting evolution of the motive from the realistic to the abstract. Its application in Nos. 27 and 28 is, however, not so good. The pathways into the units are too prominent, and the many sharp angles made by the radiating shapes annoy the eye, so that the effect of the design is unrestful. This unrestful quality is unfortunately present in Nos. 29 and 30, and is accomplished by too much action in the units. Curves attract the eye strongly, and while, when sparingly used, they may tend toward a flowing, musical line quality, too many will increase the movement unduly. No. 29 has too many curves, and in No. 30, the units do not conform agreeably to the circular quality of the saucer,—their movement is not in harmony with the structural lines of the object to which the design is applied.

Nos. 31, 32, 33, 34 and 35 are somewhat rudely drawn, yet they show much invention and a good feeling for design. A lack of experience in composing is evident in all of these sketches. No. 31 is good in proportion and invention but lacks in refinement and in a good distribution of shapes. No. 32 is unusual in invention, but shows a lack of harmony between the design unit and the space which it occupies, making the units very pronounced in effect. In No. 33 the units are too large, and the darks are too prominent,—they do not seem to unite with the light shapes. In No. 35, the five pointed star effect is unpleasantly aggressive; here again too many curves make the design seem unrestful. No. 36 seems good in invention, but is somewhat overloaded—there is too much material in the design. No. 37 shows a scattered

effect; the border without the three radiating units is sufficient. In No. 38, the design is hardly suitable for a cup and saucer; it would find a better application as a lace pattern. No. 39 ought to yield good results, if done in colors showing less contrast than black and white; it is interesting in handling. The group from Nos. 40 to 45 shows invention, but in all except No. 40 there is a tendency to over-ornamentation. No. 40 is more simply handled, and in colors contrasting not too much should make a practical design. In No. 41, the scallops are too pronounced. In Nos. 42 and 43 there is too much movement, which could, however, be partly corrected by means of less contrast in light and dark. No. 44 has too many points and zig-zag lines and is therefore unrestful. No. 45,



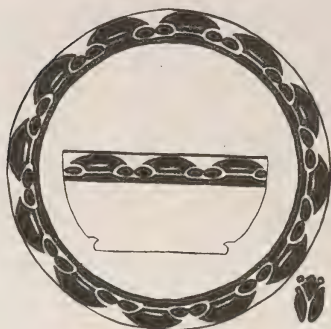
No. 26. E. N. B. I.

while possessing dignity and much merit, shows the rectangular shapes too prominently, although this effect could be overcome by making the rectangles narrower. The sketches from Nos. 46 to 49 have some merit, especially Nos. 47 and 48. The designs are quiet and simple. In No. 48 the border is too wide. No. 46 is rather spotty in effect. No. 49 is unrestful, because there is too much movement. All of the designs in this group lack excellence in workmanship. No. 50 is carefully done and shows good invention, but the design unit seems too aggressive. No. 51 is excellent in workmanship, shows good invention as to unit, and its light and dark shapes are well balanced. The manner in which the unit is repeated makes a set pattern, whose radiating quality is not agreeable. No. 52 suggests rather too vividly the "crawly spider" quality. The eye is rather fascinated by the movement engendered in the design by the use of too many legs. The technique in No. 52 is very good. In No. 53 the unit has a rather weak appearance, due to the use of many thin lines. The peculiar placing of the units gives the effect of a too pronounced pathway. In No. 54 the unit, especially the body of the insect, is too prominent, but there is a restraint exercised in the composition which gives the design simplicity and dignity. Here again the technique is good.

Lack of space makes it impossible to give criticisms on all of the designs which were submitted, and for this reason, also,



No. 52.



No. 20.



No. 29.



No. 27.



No. 53.



No. 24.



No. 86.



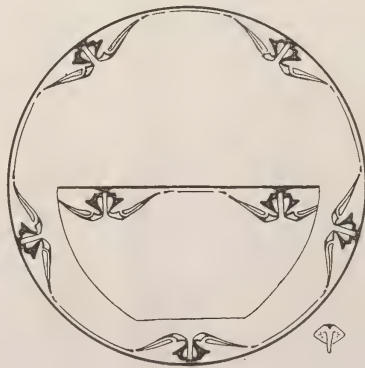
No. 28.



No. 37.



No. 89.



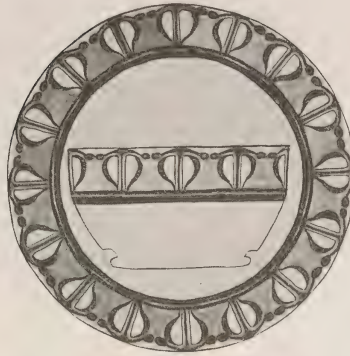
No. 12.



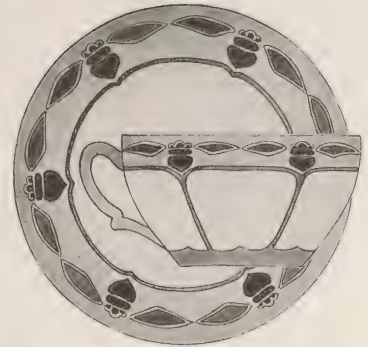
No. 88.



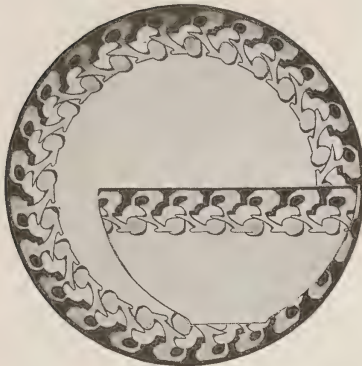
No. 32.



No. 22.



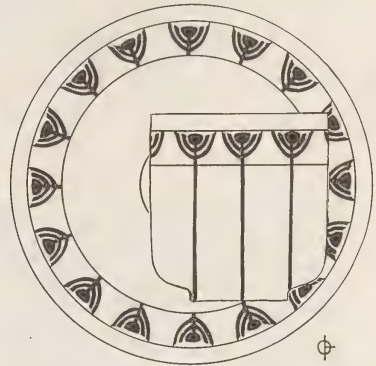
No. 54.



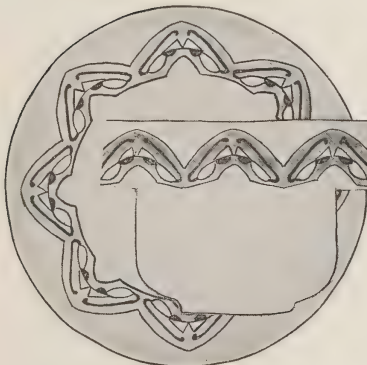
No. 13.



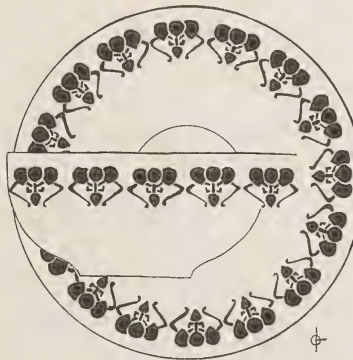
No. 30.



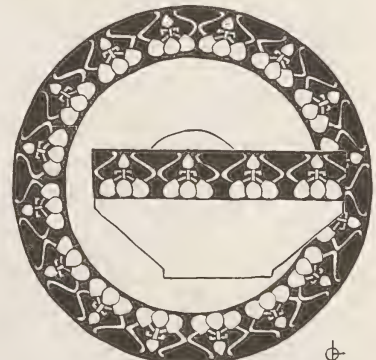
No. 40.



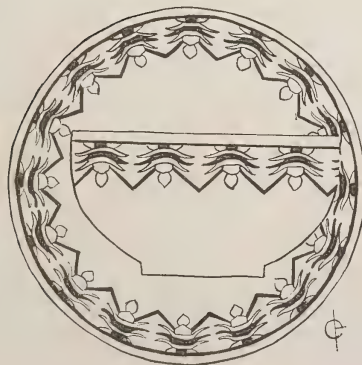
No. 41



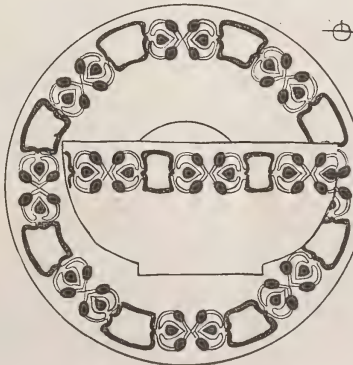
No. 42.



No. 43.



No. 44.

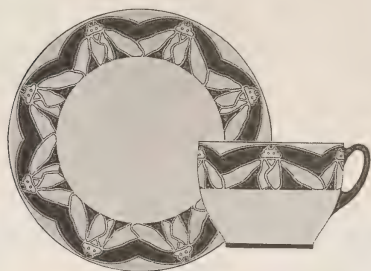


No. 45.



No. 25.

the criticisms given can not be as complete as could be wished. A criticism, in order to be most helpful, should not point out the errors only, but by illustration and explanation should show how the design could be improved. This was not possible in this number of the magazine.



No. 50. Alice Joslin.

JAPANESE FLOWER ARRANGEMENT

THE general ideas of Japanese floral arrangements may be summarized in this way: Each setting of flowers or plants must represent earth, air and water, or heaven, earth and man. In placing blossoms in a vase, the vase and water are earth, the short-stemmed flowers man and the tall ones heaven. The ramifications of this principle, the delicate subtle meanings and proprieties, are infinite.

There are flowers which represent months and flowers which represent days, and as every Japanese house contains flowers, they form a calendar for the initiated.

Every family of standing has artistically correct vases, vase-holders and flowers, and the manner of entertaining an honored visitor is to ask him to arrange some flowers. The guest is governed by rigid laws. He must not make too elaborate an arrangement, for that takes overmuch time. He always offers to destroy what he has done, to prove he considers it valueless. Only when he is urged by his host does he leave it—these are examples of the long list of restrictions. The Japanese knows them as he knows his language and his literature.—*Harper's Bazar*.



PINE CONES—MAUD E. HULBERT

FOR the cones use Yellow Ochre, Chestnut Brown and Finishing Brown. For the leaves, Yellow Green, Moss Green, Brown Green and Shading Green. In the shadows some Violet of Iron. For the branches, Finishing Brown. For the background, Chocolate Brown and Chestnut Brown and Ochre.

In the second firing let the Chocolate Brown cover all of the shadows and some of the cones and leaves.

For a vase a deep band of Red Bronze would be effective,

letting some of the cones cut into it, and having the darkest part of the background next to it.

FOR WATER COLORS:

For the cones, Brown Pink, Brown Sienna, Van Dyke Brown or Payne's Grey. For the leaves, Hooker's Green or Sap Green and Verdigris Olive Green and Russian Blue. For the branches, Van Dyke Brown; for the background, Payne's Grey, New Blue and Brown Pink.



POTTERY. CHARLES VOLKMAR

LOUISIANA PURCHASE EXPOSITION CERAMICS

(CONTINUED)

CHARLES VOLKMAR

Mr. Charles Volkmar, one of our pioneer potters, formerly of Corona, L. I., now of Metuchen, N. J., where he is making tiles for interior decoration, was represented in the Art Palace not only by 15 pieces in his flowing and mat glazes but by the work of his pupil Miss Jane Hoagland, who exhibited three pieces with incised decoration. Mr. Volkmar keeps always a style of his own not to be confounded with the work of newcomers in the art. He received a bronze medal at St. Louis.

It should be mentioned here that Leon Volkmar, Mr. Charles Volkmar's son, is now teacher of pottery at the Industrial School of the Pennsylvania Museum and that the work of his pupils is most interesting, as will be seen from the accompanying illustration. However the pieces illustrated in this photograph were not exhibited in St. Louis.

LOUISE MC LAUGHLIN

The name of Miss Louise McLaughlin has been associated with the ceramic movement in America from its very infancy

POTTERY—PUPILS OF LEON VOLKMAR
INDUSTRIAL SCHOOL OF THE PENNSYLVANIA MUSEUM

when from a pioneer china decorator she became an under glaze painter and then assisted in the movement which resulted in the forming of Rookwood Pottery. Since this, under many



POTTERY. CHARLES VOLKMAR

difficulties, she has developed the first low fire porcelain (cone 7) in America. Her exhibit in the Fine Arts Building at St. Louis was creditable in the extreme, her work has been so well illustrated in a former number of KERAMIC STUDIO



POTTERY. CHARLES VOLKMAR



PORCELAINS. M. LOUISE McLAUGHLIN



BUILT POTTERY—MARSHAL FRY.

that we have only to repeat that the shapes and treatment are similar to the pieces shown at the Pan-American—much open work and inlaid glazes and the unusual pinks and reds together with blues and greens in the coloring. It is with regret that we hear that she does not at present intend to push her work farther on account of trouble with her kiln and because of her other interests, for Miss McLaughlin expresses herself by means of many mediums, the metal work at present absorbing her attention.

MARSHAL FRY

The seven small pieces of pottery shown by Marshal Fry in the Fine Arts Building at St. Louis have been illustrated before in *KERAMIC STUDIO* but are worth showing again on account of their exquisite feeling for form, color and decoration. If the field of overglaze decoration did not need him so acutely one would be tempted to pray that he would devote himself to pottery so that the artistic standing of American potters might receive his invaluable aid.



TANKARD IN SWEDISH GOOSEBERRIES (Page 239)

Jeanne Stewart

THESE berries are very large, transparent and warm in color. The principal bunch should be painted with Lemon Yellow, Yellow Ochre, Yellow Green and Stewart's Pompadour with touches of Chestnut Brown; while the remaining clusters, which are not so ripe, should be painted with Yellow Green, Olive Green, Shading Green and Brown Green with a little Pompadour used on a few that are more ripe, consequently warmer in color. The darkest leaf in principal bunch should be laid in in Egg Yellow, Yellow Ochre, Chestnut Brown, Pompadour and Brown Green, representing an old faded leaf, with strong dark accents. The rest of the leaves in greens growing lighter and more shadowy toward the ends of the sprays.

In the second fire apply a background, shading from Ivory Yellow and Yellow Ochre at the top to Brown Green and Shading Green at the base of tankard. A touch of warm sunny color, Egg Yellow and Yellow Brown, thrown under the leaves at the right of principal bunch makes the ground much more effective.

In the third fire strengthen design and background and add shadows. The background should be kept very dark at the base and to obtain this effect, dust with powder color when ready for third fire. The high lights in berries should be wiped out with fine pointed brush when first laid in, and must not be lost in the repeated retouching.



The largest loom in the world is one recently built in Germany for weaving artists' painting cloth. It is capable of weaving feltings forty-eight feet wide.



BOWLS IN BLUE AND WHITE—J. VAN NORDEN PECK.



PEACHES—MARY BURNETT

FOR fruit use Silver Yellow, lightly blending into Blood Red, and Dark Brown for the rich dark color, using the brush with short touches to give the velvety bloom, and keep edges very soft where White Rose may be used. The leaves

of the peach tree are lighter and finer than those of other fruit trees. For lightest leaves use Apple Green with Brown Green and Shading Green; and for other leaves Moss Green, Brown Green and Dark Green.



TRAILING ARBUTUS—BLANCHE VAN COURT SCHNEIDER

FOR the first firing paint the flowers in Rosa and the leaves in Yellow Green and Brown Green, keeping the lights clear and crisp. For this fire also wash in the ground with Yellow Green, Brown Green and Apple Green. Strengthen

and add detail in the second and third firings. The centers of the flowers have a touch of Lemon Yellow and Yellow Green. Accent the flowers and buds with American Beauty. The stems are in Brown Green and Dark Brown.

LEAGUE NOTES

NATIONAL League members will be glad to learn that the newly organized club at Portland, Oregon, has applied for membership in the League. The wisdom of adopting a systematic course of study at the beginning of the club's career can not be overestimated. We congratulate the League, and wish the Oregon Ceramic (O. K.) Club a long life of usefulness.

BELLE BARNETT VESSEY,
6228 Wabash Ave., Chicago. President.



NATIONAL LEAGUE STUDY COURSE FOR 1904-1905

1. Outline drawing for tea cup and saucer.
2. Design for 6" x 6" tile.
3. Pottery Jar, with or without cover.
4. 10" plate with rim.
5. Bowl for overglaze decoration.
6. Slab 9 x 12 or 7½ x 9 inches.
7. Cylinder Vase for overglaze decoration.

It has been thought possible that some of our League members may not fully understand the detail of the Study Course, and that a further explanation may stimulate additional working interest for the remaining three months.

It is hoped that each member will send in something from each of the seven problems. If this is not possible, won't you send the results of whatever work you have done in connection with any *one* of the problems?

1. The outline for the tea cup and saucer may be made with either pencil, charcoal, ink, or any other medium, on paper 9 x 12 inches. If you can suggest anything new in the form, or in the handle, so much the better. Try especially to make the handle look as if it belonged to the cup, and was a necessary part of it. So many handles are merely appendages fastened on with no relation to the cup part.

2. Do try to make some good designs for tile. The 6" x 6" size is one which is largely used for mantel facing. Make either an independent design for a single tile, or one which will work into a continuous pattern, if placed together. They may be made either of water color, overglaze decoration, or entirely made of clay. The latter offers a splendid field for something new. Have the clay, making the tile part, thoroughly welded by kneading or pounding, so that it will not crack or scale. Make any decoration with incised lines; in low relief, or of a more positive character. You can get inspiration from any natural motive,—from simple lines problems, or from fragments of architectural bas relief. See if possible some of the Moravian Tiles by Mr. Mercer—ordinary red flower pot clay so transformed as to possess intrinsic beauty and interest.

3. The Jar, is an exercise which will strengthen your feeling for all kinds of decorative work. It will help to unify your ideas with regard to the form and its ornamentation. You cannot help keeping both in mind, as you work. The jar may be thrown on a wheel, cast in a mold, or simply made by hand. For our development, as ceramic students, the latter method seems the most practical help, as the personal touch is demonstrated from beginning to end. Can't you tell whether a piece of ware is thrown, cast, or built by hand, simply by feeling it inside and out? You can almost enter into the thought and intention of its creator by following the surface of a hand-built form. If you have access to the catalogue of the Morse collection of pottery, at the Boston Museum, the Japanese tea-jars will appeal to your consideration.

Do get a lump of clay and go to work! From the nearest

flower pot factory, or pottery, where they make crocks and jars, or from your own back yard, or you can buy prepared clay from a Kindergarten Supply House. It is simple enough, if you are not afraid to try. Any factory or pottery, where you procure your clay, is usually willing to fire your finished work, or, if you use a low-fire clay, like ordinary modeling clay, you can make it sufficiently permanent in your own china kiln. A glaze may be used or not. The unglazed pieces are very attractive. Do not think a glaze absolutely necessary to make your piece interesting, just because it is more like the finished products in the shops. Your unglazed piece may have greater interest and individuality just because it is *not* like commercial ware. If it is easy for you to make use of a glaze, do so, if you desire. But *don't* refrain from doing what you can, because you leap too high.

4. The Plate problem ought to be pretty well understood. A border may be used, or the whole plate may be decorated. As part of a table service, do not paint a picture either of flowers, fruit or figures. If you wish to use a floral or other naturalistic motive arrange it in a decoration, making a repeated pattern, so that it will be subservient to the plate itself, yet an added part of it. You may use anything above the heavens, or under the sea, as a suggestion. Mere straight lines, well arranged, make a combination of interest. Think how the Greek borders have outlived all generations.

5. The Bowl question gave some difficulty, because two slightly different shapes were made by the Ceramic Art Co., of Trenton, for use in this problem, and it was hard to make a choice. So, either one will be acceptable, and received in the exhibition of Study Course work. The comments on the plate problem are applicable here.

6. The Tile or Slab problem gives all lovers of naturalistic painting a chance. Let us hope to have some of the best picture paintings ever shown in ceramic work. Flowers, still life, figures, and landscapes all come under this head. What is most stimulating is the thought that this production is in permanent form, that it will outlast all the centuries of perishable paper and canvas. The problem calls for a 9" x 12" slab. As this size seems a little large, a slab 7½" x 9" will also be accepted. It is suggested that all framing be uniform, of black or dark wood, 2" molding, flat, so that it can be packed better for the traveling exhibition.

7. The Cylinder Vase gives an opportunity to ambitious workers, and will help to make an attractive showing for our outside friends.

This exhibition will be held under the finest auspices at the Art Institute in Chicago. Elaborate and suitable preparation will be made for us, and we in our turn, must not prove a disappointment to their generous hospitality. Afterward the exhibition will travel to our various home cities, bringing inspiration and incentive to every Club Center. *Will you do what you can to make it a success?*

MARY CHASE PERRY, Chairman of Education.



FREESIA

K. E. Cherry

THE flowers are a creamy white; put background in after carefully sketching the flowers in. For background use violet, yellow, apple green shaded to sea green and black—then wash flowers with yellow very light and shadows of violet and brown green. Leaves are made of moss green, shading green and black.

Second fire:—Strengthen background, put sharp touches on flowers of yellow brown and brown green, touch leaves with same as used in first firing.



FREESIA—MRS. K. E. CHERRY

THE CRAFTS

WOOD CARVING AND PYROGRAPHY. LEATHER AND METAL. BASKETRY, ETC.

Under the management of Miss Emily Peacock, Karol Shop, 22 East 16th St., New York. All inquiries in regard to the various Crafts are to be sent to the above address, but will be answered in the magazine under this head.

All questions must be received before the 10th day of month preceding issue and will be answered under "Answers to Inquiries" only. Please do not send stamped envelope for reply. The editors will answer questions only in these columns.

THE ART OF ENAMELING ON METAL

Laurin H. Martin

ARTISTS working in modern jewelry have reinstated this long neglected art, but probably would be workers along these lines do not clearly understand the difficulties which these artists have overcome, or the processes which they have employed in order to attain fine results.

Enamel is a form of glass, colored with metallic oxides or colorless, opaque or transparent, which when applied to metal and heated to a certain degree melts and adheres to the metal. There are several distinct ways of using enamel. The different processes are known as Champlevé, Plique à jour, Repoussé, and Limoges. Champlevé or sunken enamel is done on rather thick metal as the design must first be engraved. The different metals are measured by gauge; use always American gauge. No. 15 is a good thickness to use in silver, and No. 12 gauge in copper. Silver is a stiffer metal than copper, so does not need to be quite so thick. When firing the enamel the metal has to come to a red heat which makes it very soft and easily bent. If a thinner copper than No. 12 or a thinner silver than No. 15 is used, it might bend, which of course would crack the enamel.

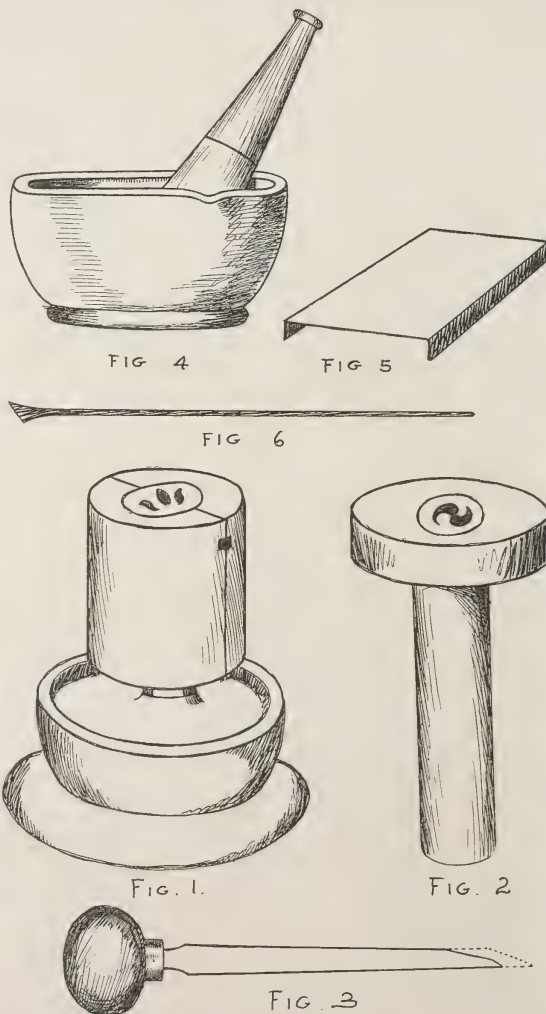
First hammer the metal on a steel block with a flat steel hammer, this is done to close up any minute air cells that may be in it, if these air cells are left in the metal the enamel will crack. Anneal the metal to make the engraving easier, clean it in acid and put on the design. Chinese white water color rubbed on the silver and dried makes a good foundation to draw on. When the design is drawn on the metal, scratch it in with a steel point, so that it cannot be erased. Fasten the metal on an engraver's block (see Fig. 1), or on a piece of wood with cement (see Fig. 2). The next step is the engraving. Vautier's engraving tools are very good, and the following numbers are the most useful: Nos. 40 and 44 flat and Nos. 51, 52, 58 and 60 round. These tools do not come sharpened (illustration No. 3 shows how they look when they are bought, and how they should look when sharpened and ready for use.)

To sharpen, the point must be broken off with a hammer, then ground down on the grindstone. Put the final edge on by rubbing it carefully on an Indian oil stone. Test the tool by resting the point lightly on the finger nail; if it catches it is sharp enough. Tools that are not well sharpened slip on the metal.

As it takes some practice to hold the graver properly and engrave well, it is a good plan for the student to work on several studies in line and curve before attempting a piece for enamel. If the design is small, outline it with the engraving tool Nos. 52 or 53, holding the tool in the palm of the hand, resting the thumb on the work and then forcing the tool ahead. If the tool is held at too great an angle it will not cut but becomes embedded in the metal. The outline must be gone over two or three times and when it is deep enough use the flat graver No. 40 to cut out the space in the centre, or if the space is a large one use a wider tool. The whole space should be about two-thirds as deep as the thickest of a ten cent piece. When the engraving is finished take the metal off the cement by heating it slightly, any cement left on the metal can easily be burned off.

The next step is to get the metal very clean. Silver and

copper are cleaned by boiling in a solution made of one part sulphuric acid to six parts water. Always use a porcelain vessel for this solution and put the acid in first, then add the water; place this vessel in another containing water kept at boiling point. A weak solution of hydrochloric acid is also used for cleaning silver and nitric acid for gold. Some enamellers boil the cleaned metal in clear water after the acid bath and others use hot alcohol. In any case the cleaning should be done just before enameling.



Enamels come in lump form and look very much like ordinary stained glass. The colors are numerous; but fifteen transparent and as many opaque are sufficient to start with. Many combinations can be made from these, that are better than using the colors straight.

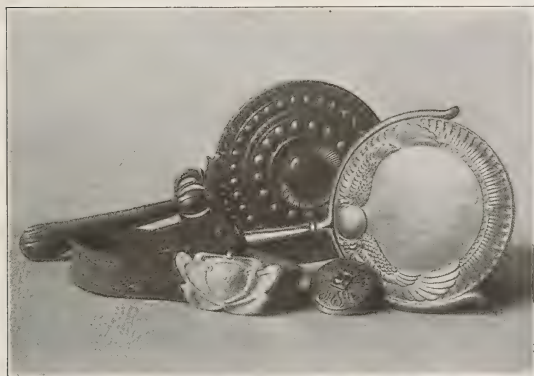
To grind the enamel put a lump into a Wedgwood mortar

(see Fig. 4) and cover it with water. This is to keep it from flying; pound the pestle with a wooden mallet to break the lump into small pieces. Put these in a small agate mortar and grind finer, using the pestle in the hand and the water as before. The water must be changed often in this process so as to keep washing the enamel. If this is not done the enamel is not clear when fired. Opaque enamel does not require washing unless dirt gets into it. It is not necessary to grind the enamel too fine, the coarser it can be used the richer the color.

As the colors selected are ground, arrange them in saucers. At this stage the enamel looks like fine colored sand and is ready to put on the engraved and cleaned metal. Take a small piece of German silver wire and hammer out one end of it, file this into a spoon like shape (see Fig. 6). Take up the enamel with this and put on the engraved spaces. Always keep water with the enamel at this point, so that the powder will deposit itself easily. There are unlimited combinations and different ways of applying the enamel for different effects. For illustration, imagine a leaf which needs both light and dark green. One method would be to put in a light green and fuse it on the metal, afterwards shade it with a deeper color and fuse again. Another method would be to mix the light and dark color together in the powder form, placing this in the design and fusing together in one firing. This must be left to the judgment of the artist.

Enamels are fused on the metal by getting it to a full red heat. Great care must be used not to melt silver, as the melting point of enamel and silver are not far apart.

TO BE CONTINUED.



Illus. No. 1.



Illus. No. 2.

MIRROR BACKS IN METAL AND WOOD

THE hand mirror is something everyone uses and is a good problem for the student either in metal, wood or horn. The following points should be well considered; to have it a good shape not weighty, or clumsy in appearance, and the design just right. In the group of work done by students of applied design at the School of Industrial Art of the Pennsylvania Museum, Philadelphia, illustration No. 1, the darker mirror is of bronze designed and made by F. C. Griffith; the lighter one is of brass, designed and made by E. J. Earley.

The carved mirror backs in illus. No. 2 were designed and made by students at Pratt Institute, Brooklyn. The two



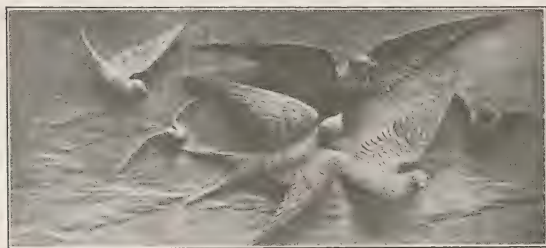
Illus. No. 3.

mirror backs in illus. No. 3 were designed and made by Haswell Jeffery as follows: Maple one inch in thickness was used, the general outline sawed out and the design sketched on, followed by making the outline true, and modeling the design. A soft finish was given with a file and sandpaper. Devoe's oil stains were used to color, walnut first for dark effects and when this was dry antique oak was put on, then malachite green. When this stain was thoroughly dry, the wood was rubbed well so that the grain of it showed under the stain. A mixture of wax and turpentine (warmed) was applied and after a few hours rubbed well, obtaining in this way a soft dull finish.



Illus. No. 4.

Illus. No. 4 was designed and made by Miss Nelbert Murphy. The texture and feeling was delightful in it. It was carved in low relief on a soft grey green wood which grows in Cuba; the color is so unusually good that only a white filler and a little wax was used in finishing.



Illus. No. 5.

The bird panel, illus. No. 5, by Haswell Jeffery, was carved on Cuban mahogany in rather deep relief.

ANSWERS TO INQUIRIES

A. Covell—You can probably get tools for stained glass work and lead from The Colwell Lead Co., New York. The stained glass can be bought from Louis Heidt, McRibben and Boerum Sts., Brooklyn, N. Y. Directions for doing this work were given in the November and December numbers last year.

C. F. Wis.—Wm. Vinsser & Co., 197 William Street, New York, keep all kinds of lacquers for leather; these are transparent and rich in effect. Tools for leather and metal can be bought at the Karol Shop, 22 East 16th Street, New York.

STUDIO NOTES

In mentioning Mr. Sugano's bird study in February number, we said by mistake that Mr. Sugano was of Portland, Oregon. He is the Japanese artist working and teaching in the studio of Mrs. R. F. Mead, 706 S. 9th St., Tacoma, Wash.

The manufacture of Lustres previously carried on by the late Mrs. Anna Armstrong Green of Chicago, has been resumed under the firm name of Green & Co. Her husband, Dr. T. S. Green, is associated in the business as expert chemist.

Miss Harriette P. Strafer will have an exhibition of her miniatures and pastels in her studio, 27 West 67th St., New York, on Wednesdays and Saturdays from March 1st to March 18th.

TREATMENT FOR THISTLES (Supplement)

Mary Alley Neal

SET your palette with Lemon Yellow, Apple Green, Royal and Brown Green, Yellow Brown, Auburn and Finishing Brown, Rose, Violet, Black, Copenhagen Blue, Pearl Grey and Grey for flesh. Take the prominent thistles and leaves, draw them carefully and the rest of the leaves, stems and thistles indicate with the pencil or just block out the design. Paint the prominent thistle in soft pinky tones of Yellow Brown and a little Rose Violet and Rose, and make a grey of Violet and Yellow blending softly, taking out the high lights with the finger-nail covered with a piece of silk. The calyx is painted with Auburn and Finishing Brown.

Now put in the background, using plenty of Medium and Lavender oil to keep it open. At top of vase, Copenhagen Blue, then into Pearl Grey, Grey for flesh, then Violet into Yellow Brown, Auburn Brown and Finishing Brown, blending softly into the thistles and leaves, painting all the thistles into

the background while wet with the Grey and Yellow Brown, and one or two quite violet; buds are violet; calyx of Auburn Brown and Finishing Brown, stems and leaves Brown and Royal Green, soften all edges with a pad and take out plenty of high lights and a few leaves, making the latter of Apple Green and Yellow. Dust when dry with the same colors and fire. For second fire strengthen where necessary, adding a few touches of pure Violet in the thistles, shading stems and adding shadow leaves and thistles over the background, strengthen the background, dust again and fire.

ANSWERS TO CORRESPONDENTS.

Mrs. H. H. D.—Work for reproduction in black and white is done in two ways, wash drawing and pen and ink. For wash drawing, a smooth water color paper, stick India ink and water color brushes are necessary—usually about No. 8 round sable and a large flat sable for background work or large washes. The round sable will point for any small and more delicate touches. Work exactly as in ordinary water colors. For pen and ink, a fine Bristol board, the finer qualities show a cleaner line and more even washes if the latter are introduced as they often are in design work. For designing the regular India ink pen is best, although for sketching many of the best artists use the ordinary pointed pen, sometimes quite large and blunt. The Higgins water-proof India ink is best for this work as it is ready prepared, of uniform blackness, and does not run into design if a wash goes over it when dry. Works for reproduction are always best drawn a little larger than necessary, but no special proportion is required. For pen and ink alone no difference need be made although weak lines are improved by reduction.

D. A. B.—The semi-conventional treatment of design is quite appropriate for your jardiniere, which appears to be a simple shape and quite easily decorated. We would suggest either the Scarlet Bean of Dec. 1904, the Primrose in Oct. 1904, or one of the Trillium studies in Sept. KERAMIC STUDIO, or any other flower subject you may prefer; you will find several color schemes in the Trillium article; and the manner of treatment in another answer to correspondents in this number. Repeat your drawing of the flower around your jardiniere to give the effect of a repeated design, bringing the heaviest part of design on the "bulge" of your piece—paint broadly with a soft wide outline around the entire silhouette of the flower, not around the inside details. We would prefer you to choose your own design and color scheme, not because we are not willing, but because in the choice you educate yourself. The method of work, you will find fully described as directed. The whole piece should be finished as for one fire, then if the color is to be enriched you may do so in repeated firings with light dusted color over the whole or part. See "A. W."

Always do the grounding first, though powder color is dusted onto the half dry painting when it is desired to bring the design together by a similar tone over whole or part. The order of work is as follows: Drawing, lightly if to be finished before first fire, in India ink, tinting or dusting background. If tinted all over, it should be fired before drawing design or if dusted, the parts not covered with dusting should be cleaned out first with a rag or stick. After firing, paint design and outline, dusting color over whole or part fire—or if you prefer you may do your painting first fire, dusting over the entire surface afterward. A heavy grounded color will not bear repeated fires, but a piece can be lightly dusted and refired several times. Always put a heavy ground first, then dry—draw design and clean out before painting. Better, however, get depth by repeated fires and light dusting than by one heavy grounding. Where color is put on too heavily either in grounding or painting, it is very likely to scale in the second fire if not in first. Your scheme for vase should work out well in a semi-conventional treatment, though we would prefer a warmer color than maroon with mahogany furniture. We would suggest as a good color to go with your jonquils a rich brown or green, these would harmonize with everything.

A. W.—Philosophy of Color, Clifford & Lawton, 19 Union Square, New York City. Old edition, 25 cents; new edition, revised, cloth bound, 50 cents.

When an oil kiln becomes clogged it may be cleaned with a poker through the "clean-out," the little opening in the front bottom of kiln below door. Try not to get it clogged—by not letting too much oil into the burner, just enough to burn with a good strong roaring sound. The flame should be seen through the little round mica over the door—just a "nip" and no smoke—later the flame may be a little stronger but not enough to smoke. Greys for flowers are usually made by combining carmine and apple green. Most makers of colors have some greys for flowers already mixed, you might inquire of them direct. Grey greens also come ready mixed but you can get a grey green effect by adding a touch of black and banding blue or some other strong blue to royal or moss green. Celadon is a ready prepared grey green. Dark green 7, used light, is a grey green but a little harsh; pearl grey would improve it. We have given several plates and other designs in the style of decoration

you wish. The method is usually to tint the entire piece a soft light grey yellow or grey green or whatever general tone is desired. Then the design is painted in the chosen color scheme, and sometimes a color is dusted over the entire border to bring it together in some particular scheme, or sometimes a second fire is given with a light dusting of color over part or whole of the design.

For instance, the prize design by Marie Crilley Wilson, Christmas KERAMIC STUDIO. Tint entire plate lightly with yellow brown having a touch of black, paint in design with royal or moss green for trees, etc., and pompadour for roofs of houses, etc., according to the color you wish to preponderate. When finished dust lightly again over border only with the yellow brown mixture or Miss Mason's neutral yellow or one of Mr. Fry's neutral tones. Write the Prang Educational Company for a list of books by Mr. Froehlich, color chart, etc.

E. M. L.—Your complaint that the naturalistic studies are not exact enough for copies in many cases is quite true—but there are many reasons why it should be so. In the first place, a photographic representation of anything is not art. A naturalistic study of an object is supposed to give the general effect both of color and light and shade, also to suggest good grouping or arrangement and the main characteristics of the growth but *not* the details. If you *must* copy, then there is enough in these studies to copy, but they are intended rather as suggestions of the way in which you should make your own studies from nature. Detail drawings are given always in studying an object for conventional design. These you should make yourself after the examples given so often in KERAMIC STUDIO. It is not possible for one artist to see any object in the same way or in the exact coloring that it presents itself to another.

Then again—it is not always possible to get as good studies from nature as we would like, so we are forced to give what we can get, or our readers would have to go without any. Until you have tried to publish a magazine so full of illustrations as KERAMIC STUDIO you will hardly be able to appreciate the difficulty of obtaining what you wish *when* you wish or need it. The treatments are such as the artist sends with the study, so if further information is required the Ans. to Corres. columns are always open, and no one need complain of insufficient instruction for they may always have it for the asking. The same colors and mediums are used in both naturalistic and conventional work. For an even tinting, the colors are padded as in naturalistic backgrounds but more carefully. You will find directions in many back numbers of K. S. Ans. to Corres. You will find any amount of designs in conventional or semi-conventional work for dinner and tea sets, dessert plates and bread and butter, in the current and back numbers of K. S. You have only to make your choice. Realistic designs for such plates we do not give as there is no such thing—but realistic studies we give in every number and in different sizes of circles so that all you have to do if you wish this kind of decoration, is to apply the study to whatever size plate you wish to decorate. We should say "desecrate" for we do not consider realistic studies as being in their right place on plates.

The KERAMIC STUDIO sells for ten cents a very convenient plate divider which will be found of the greatest assistance in measuring or dividing any object to be decorated. We have given many articles and much information in Ans. to Corres. about the manner of doing conventional work—one will be found in the next number. In firing several objects with the same tint, they should be placed as nearly as possible in the same part of the kiln in order to have the color uniform, also care must be taken that the tint is put on of a uniform depth.

L. E.—For the dull finish on china, you must use the mat colors as you use the ordinary ones. In purchasing colors from our dealers, always ask if they have any special instruction to give in their use as different makes sometimes demand a different treatment. Ordinarily the powder color is rubbed down with fat oil, just enough to make the consistency of stiff tube color, thin with oil of lavender until no longer tacky, put on quickly and as evenly as possible with a large brush and pad until dry. Sometimes a second coat and another fire is necessary to procure an even mat surface. Other oils and mediums can be used if you prefer or have become accustomed to others.

J. D. W.—Many different mediums are used in china painting, and each one is compounded of different mixtures of sometimes quite different oils. The one we have found very useful and the one used by Mrs. Phillips for figure painting, is compounded of 6 drops of oil of copaiba to one of oil of cloves. This is equally good for flower work. Enamels in tubes should be used with lavender oil for large surfaces, for small dots, turpentine. If in powder, fat oil enough to hold the powder together should first be used. Soft enamels should be fired only once, it is sometimes possible to refire but not very safe. Aufsetzweiss will stand two fires and sometimes more, but it is safer always to finish enamel work in as few fires as possible. White enamels can be mixed with any color desired except the iron reds and browns, such as pompadour, carnation, blood red, yellow brown and other browns. If these colors are desired, it is possible to paint with them the surface of the

already fired white enamel. KERAMIC STUDIO sells a plate divider for 10 cents. It is difficult to find good tiles for decoration of the size desired, but if anywhere you will find them by writing to the wholesale houses advertising in KERAMIC STUDIO.

G. S. A.—Belleek china can be used in figure painting with very fine effect, the only thing to guard against is the too free use of tender or cool shadow, as the reds fire out and the blues fire in very strongly. We would advise using the warm tones somewhat stronger than on French white china.

Mrs. E. E. T.—You will find color scheme of poppies with the color supplement of Mrs. McLennan Hinman's poppies in January 1905 KERAMIC STUDIO; also the article on poppies by Mrs. Sadie Wood Safford, in January 1903 KERAMIC STUDIO. For color scheme of cherries see the March 1902 number of KERAMIC STUDIO study by Jeanne Stewart or the study by Mary Alta Morris in December 1901.

Why go to New York

FOR

Undecorated China and China Painters Materials

WHEN

W. H. BARRON,

1303 Fulton Street.

Brooklyn;

Carries a large line of Artistic China, all the Colors. China fired every evening at 4:00 o'clock. Unexcelled for high glaze firing and perfect pinks. No Catalogues. * * * * *

The "IDEAL" CHINA KILN

THE "SPHINX" Improved China Palette Box

With Removable Palette
Patented Nov. 29, 1904



DIRECTIONS—For the purpose of cleaning or replacing the Palette, in case of breakage, slide back the sleeve connecting and locking the two ends of the steel spring wire, that holds the Palette in its place. By lifting up the two ends and pulling the wire out of its groove, from any one side, the Palette is easily removed and afterwards placed back in its former position in the same manner.

Made of Heavy Japanned Tin,
in two sizes.

Size 9x13, price each.....\$1.25
Size 6x9, price each......90

For further particulars inquire
at

F. WEBER & CO.

Manufacturers, Importers, Dealers
Artists' and China Painters' Materials,

709 Locust St., 227 Park Ave.
St. Louis, Baltimore.
1125 Chestnut St.,
PHILADELPHIA.

COOLEY'S GOLDS, BRONZES AND OILS

and every requisite for China Painting.

WHITE CHINA FROM ALL COUNTRIES FOR DECORATING

Send for Catalogue.

BOSTON CHINA DECORATING WORKS.

L. COOLEY, Prop., 38 Tennyson St., Boston. Established 1860

FOR ALL DESIGNERS

A HANDBOOK OF PLANT-FORM

FOR STUDENTS OF ART DESIGN, ART
SCHOOLS, TEACHERS & AMATEURS

ONE HUNDRED PLATES,
COMPRISING NEARLY 800 ILLUSTRATIONS

Drawn and Described, and with
AN INTRODUCTORY CHAPTER ON DESIGN
AND A GLOSSARY OF BOTANICAL TERMS

BY

ERNEST E. CLARK

Art Master Derby Technical College, National Silver
Medallist in Ornament and Design.

LARGE 8vo.

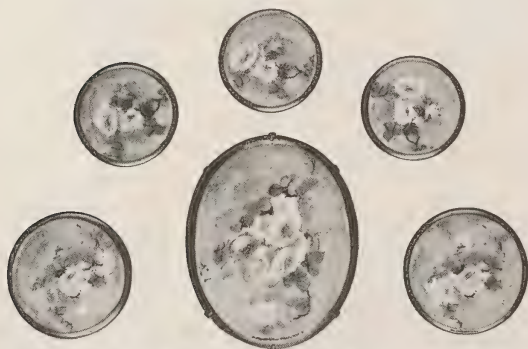
\$2.50 NET

Send for Art List
John Lane 67 8th Ave. New York

MINERAL TRANSFERS

FOR CHINA DECORATION IN ALL ITS BRANCHES

SPECIMENS OF BUTTON DECORATION.



PALM, FECHTELER & CO.

80 FIFTH AVE., NEW YORK. 45 LA SALLE ST., CHICAGO. 1ST NATIONAL BANK, EAST LIVERPOOL, O.

**APPLY TO YOUR SUPPLY HOUSE FOR
SAMPLES AND INFORMATION.**

An addition to our

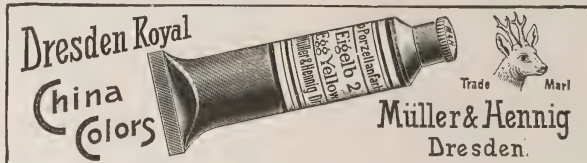
Color Study Catalogue

is being prepared!

MAILED FREE ON APPLICATION.

KERAMIC STUDIO PUB. CO.

Emily J. Peacock
Worker in Metals. Enamelling.
The Karol Shop,
22 East 16th Street, New York.



FREE-- A Beautiful Flower Study with every
50 cent order for

China Painting Materials

Discounts to Teachers.
Send for Art Catalogue.

ERKER BROS. OPTICAL CO.,

608 Olive Street,

ST. LOUIS.

**White China
for Decorating.**

D. & Co.
FRANCE.

IF YOU WANT QUALITY,
The Best SHAPES,
RESULTS in Firing.

USE THIS MAKE OF CHINA.

New Catalogue just issued, will be sent on application. Goods must be ordered
through nearest local dealer.

SOLE AGENTS FOR THE UNITED STATES.

Endemann & Churchill,

50 Murray St.,

New York.

KEEP THE FIRE ALIVE

KERAMIC STUDIO

CONTRIBUTORS

MR. F. B. AULICH * * * * *
MR. CHAS. BABCOCK * * * * *
MISS MARY BURNETT * * * * *
MRS. EMMA A. ERVIN * * * * *
MISS L. M. FERRIS * * * * *
MISS MAUD E. HULBERT * * * * *
MR. JOSEPH T. HIGGINS * * * * *
MISS JEANNETTE KIMBALL * * * * *
MR. LAURIN H. MARTIN * * * * *
MISS MARY OVERBECK * * * * *
MISS MARGARET OVERBECK * * * * *
MISS EMILY F. PEACOCK * * * * *
MISS EDITH ALMA ROSS * * * * *
MISS SABELLA RANDOLPH * * * * *
MRS. ALICE WITTE SLOAN * * * * *
MISS OLIVE SHERMAN * * * * *
MRS. BELLE BARNETT VESEY * * * * *



APR. MCMV

Price 35c.

Yearly Subscription \$3.50

A MONTHLY MAGAZINE FOR THE POTTER AND DECORATOR

CONTENTS FOR APRIL 1905

	PAGE
Editorial	261
N. L. M. P.	261
The Beginner in Conventional Work	262
Carnations	263
Child's Bread and Milk Set	265
Joss Flower or Chinese Lilies	266
Vase	266
Jonquil Design	267
Jonquil Design	267
Louisiana Purchase Exposition Ceramics—continued	268-269
Chrysanthemums (supplement)	270
Brush & Mirror Backs	270-271
Studies in Outline	270
Drawings of Fish	272-275
How to Make Colored Enamels	274
Tea Tile	276
Tile Design—Peacock Feather Motif	276
Child's Pitcher	276
Goslins	276
Berry Plate	277
Cup and Saucer	278
Hydrangea Border for Bowls	278
Blackberries	279
The Crafts—The Making of a Sun Dial	280-281
Tiled Box for Plants	281
The Art of Enamelling on Metal—continued	282
Sea Belts	283
Answers to Correspondents	283



How about that Renewal?
Do it now!

KERAMIC STUDIO PUB. CO.

Emily J. Peacock
Worker in Metals. Enamelling.
The Karol Shop,
22 East 16th Street, New York.



KERAMIC STUDIO

Vol. VI, No. 12

SYRACUSE, NEW YORK

April 1905



THE surprise at finding so few interested in the naturalistic competition closing February 15th, and the disappointment of finding this class of work as a whole so far below the average, had almost made us decide to give up this class of competition. We have so often been given to understand that the majority of our readers preferred the naturalistic, that we expected this problem to surpass all others in variety and merit, especially as we offered higher prizes than for the others. However, the season of the year may have been at fault so we will try once more, later. No study was found worthy of first prize. The second prize was awarded to Mrs. Emma Armstrong Ervin. Mention, Miss Mary Burnett.

The Problem for the August competition, closing June 15th, will be a conventionalized border in black and white for a fish platter, one section at least to be given in color and the design to be accompanied by a treatment in mineral colors. The platter to be 20 inches in length. Studies of fish with conventionalizations by French artists will be found in this issue. First prize, \$10.00; Second prize, \$8.00; Third prize, \$5.00.

The approaching exhibition of the New York Society of Ceramic Arts which will be held at the National Arts Club, 37 West 34th street, from April 19th to May 8th, is awakening much interest and enthusiasm. The President, Mrs. Anna B. Leonard is using every effort to make it a success beyond all former years, and all ceramic workers including the members of the society are expecting great things. The exhibition of American Pottery and Porcelain to be held in connection with it will be of unusual interest also.



THE following programme has been arranged for the twelfth annual exhibition of the National League of Mineral Painters, to be held at the Art Institute, Chicago, May 9th, 1905. The exhibition will open with an evening reception in the galleries of the Institute.

WEDNESDAY, MAY 10TH

10:30 A. M.—Business Meeting.

2:30 P. M.—Address of welcome by Director Wm. R. French of the Art Institute. Miss Mary Chase Perry, Detroit.

THURSDAY MAY 11TH

10:30 A. M.—Election of Officers.

2:30 P. M.—Address by Louis J. Millett of the Art Institute. Mr. W. D. Gates, American Terra Cotta and Ceramic Co.

There will be many other attractive features added to this programme for the entertainment of all who may visit the exhibition, the details of which have not been completed. We hope to have all members of the League who can possibly arrange to visit Chicago during this time, to do so, as we cherish many happy reminiscences of the hearty response from all clubs from California to New York during the exhibition of 1899.

We have secured space in the Lewis & Clark Centennial Exposition at Portland, Oregon, in the Fine Arts Building—if erected—if not, our exhibit will be in the Liberal Arts Building. We have all arrangements made for cases and have been fortunate in securing the assistance of Mrs. Parish in looking after our exhibit whilst there, so that all exhibits will be given the best of care in placing, arranging and packing after the exhibition is over. Mrs. Parish is the newly elected President of the Oregon Club.

I hope to have a letter in a day or two giving more details as regards plans, arrangements, etc., and would ask all members to send at least a few pieces that we may make a creditable showing and I am sure whoever will make the effort will feel more than repaid by the appreciation of the Western artists and visitors to the Exposition.

NELLIE A. CROSS, *Chairman.*

Exhibition N. S. M. P.

1217 Farwell Ave., Rogers Park, Chicago, Ill.

The annual meeting of the National League of Mineral Painters will be held in Fullerton Hall, The Art Institute, Chicago, on Wednesday and Thursday, May 10th and 11th, 1905.

We wish every affiliated club would be represented by a delegate, prepared to give a recital of their failures and successes during the past year. These deputies would then enter into the spirit of affairs with more enthusiasm, carry home the very essence of the meeting, and thus rouse greater interest for next year's study course.

There will be the election of Advisory Board members, and the discussion of the duties, privileges, expenses, etc., of individual members, proxies, the Comparative Travelling exhibition, and judges, and such other matters as will aid the Board and chairmen of committees in furthering the interests of the League.

We call especial attention to the above questions that have become an unwritten law through usage, and desire to add them to the constitution if it is the pleasure of the convention.

BELLE BARNETT VESSEY,
President.

Grace P. McMurtry, Cor. Secretary.

Lulu C. Bergen, Chairman Transportation,
7404 Harvard Avenue, Chicago, Ill.

THE BEGINNER IN CONVENTIONAL WORK

MANY beginners feel at loss in starting a conventional design. What to do first?—what next? is a constant inquiry.

DRAWING THE DESIGN

First you need a plate divider, such as is sold by KERAMIC STUDIO for ten cents, then a sheet of drawing paper and another of tracing paper, a bottle of Higgins' India ink, and an India ink pen, a medium soft pencil and your china painting outfit. If you wish to copy a design directly, if you wish to repeat a plate design, for instance, just as it is, on another plate, the problem is a simple one. Make a tracing with your soft pencil, of a section of the plate, one repeat. If it is a balanced design, *i. e.*, the same forms reversed on either side of the central motif, it will not be necessary to blacken the lines on the reverse side, otherwise go over the tracing with a pencil on the reverse side. Moisten a rag with a little old spirits of turpentine, some that has thickened a little with standing, or else put a drop of fat oil on the rag with the ordinary spirits of turpentine, rub this thoroughly all over the plate or border then wipe off so that it shows no smears. Let this dry a few minutes or warm a little on a stove or alcohol lamp; lay the plate, face down, on the plate divider, fitting it to one of the circles, then with your pen and ink mark the divisions 3, 5, 6, as the case may be. Turn over the plate and repeat the mark on the face. This gives the point from which to trace each section, so as to evenly distribute the design. Lay your tracing, face down, on the plate, go over the outline with your pencil or a hard point of some kind. The design will be found lightly traced in pencil on the plate. Take your pen and ink and go over the design carefully making a fine outline and correcting the tracing where it may have slipped. Then trace the remaining sections, one at a time until the whole border is drawn. If the plate should be a little larger or smaller than the original copy, the design will have to be lengthened or shortened where the sections meet. If the design is a balanced one, the tracing can be used first on one side, then on the other; if the motif is simply repeated without reversing the tracing may have to be gone over again with a pencil on the wrong side. The drawing being completed the design is ready for painting. If, however, a tinting has first been made over the entire plate and fired before putting on the design, a softer and more harmonious effect will be gained.

If a plate design, however, is to be applied to a cup and saucer or vice versa, a more difficult problem is to be met. Place the cup on a circle of the plate divider, opening downward and mark on the rim the divisions desired. If the plate border is too wide for good proportions on a cup and saucer take your drawing paper and measure a straight band of the width desired and the same in length as the circumference of the cup, divide this as you have divided the cup into 3, 4, 5, 8, etc. sections. In one of these sections draw the same design as the one to be copied, reducing it in size and arranging it to fit the straight section instead of a curve. Then make a tracing of this and apply to cup as directed before. An aid to arranging a curved design on a straight border or vice versa, is to draw a line through the center of both straight and curved border from end to end as well as from top to bottom, and see that in the applied copy, the different parts of the design touch the lines at approximately the same points. Then the process will have to be reversed in applying cup design to the saucer. The saucer design will of course, be of the same width as that of the cup, the only problem is to fit the cup section to the saucer; lay the saucer on the plate divider and decide which division will be nearest in length to

the measurement of a section of the cup border, then proceed as in directions for designing a plate, curving the design of the cup border and lengthening or shortening the design where the sections meet. Sometimes a little portion of the design may have to be omitted or something added to fill the space or make connection. All lines which are vertical on the cup should run at right angles to edge of saucer or slate, making a line which if continued would strike the center of the circle. A good idea in adapting a cup section to saucer or plate or vice versa, is to draw a number of these vertical lines through the sections to be adapted and see that the parts of design touching these correspond; the change will generally have to be made in the lower half of the design rather than the upper as a curved panel is shorter at the bottom than at the top. Of course if you are expert in drawing, these helps may be omitted. There are some designs which will be found more difficult of adaptation and in a general article it is impossible to meet these emergencies; the only advice possible is to use at first only the designs which are easily adapted and as you become more expert you will find the more difficult problems easier to solve.

EXECUTING THE DESIGN IN COLOR

There are many styles of conventional design, more or less elaborate and requiring different materials and different handling. We will start with the simplest, a design in one color. The design being already drawn, the next thing is to fill it in with color. If flat enamel is desired, the tube Aufsetzweis is mixed with $\frac{1}{2}$ of whatever color is desired, to this mixture then add $\frac{1}{3}$ flux. Thin this with spirits of turpentine for small spaces or oil of lavender for large washes; if color alone is used, add to it $\frac{1}{4}$ flux and treat in the same manner as enamel. Use a square shader as large as can be conveniently handled, the larger the better as less brush marks will show—charge the brush off with color and the enamel mixture and let it flow off the brush as much as possible; when too little color is in the brush, the brush marks will show more.

[TO BE CONTINUED]



MACKEREL DESIGN FOR VASE—LASERRE FROM "ART ET DECORATION"



CARNATIONS—F. B. AULICH

THE prominent carnations in this study should be painted in Rose; the dark ones in American Beauty and Crimson Purple. For the background use Blue Green, Blue Violet and some American Beauty for the distant ones. Paint background first, then the flowers, lifting out the high light with a pointed shader.



Brown Banko Teapot of fine quality, flowers inlaid in translucent enamel, revolving knob. Five ordinary Banko teapots.

BANKO WARE.

THE Japanese cannot understand the partiality of Europeans and Americans for the overgilded, overdecorated porcelains of their country, and their entire disregard and neglect of banko pottery. To be esteemed by the Japanese connoisseur, Satsuma (for example) must show a fine and even crackle on its old-ivory-like surface, and little more in the way of decoration (if any at all) than a crest; but the foreign buyer demands Satsuma with the surface completely hidden under many colored pastes and gorgeous with much gilding. Except as something astonishingly cheap, banko is to him unknown. The possibility now is that very little good banko (outside of the museums) will ever be seen again, as the owners of the banko potteries in Japan are among the leading commercial spirits of the country, and apparently careless of everything except to fill their enormous orders for the foreign trade as quickly and as cheaply as possible.

Banko has always been almost ignored by foreign collectors. Bowes speaks of it but only slightly; yet Miss Denton of Kyoto asserts that an appreciation of banko in Dai Nippon is an open sesame to the innermost circle of the elect, as it is held that only the born lover of ceramics can properly appreciate the charm and the art of this quaint pottery.

It is not made of any rare kaolin, but of humble, common clay, and it has almost no intrinsic value, merely a great artistic one. But in a country like Old Japan intrinsic value was not paramount, the artistic possibility was enough, and simplicity was a quality which was worshiped. The artist-potter would take a sheet of the beautifully pliable (yet tough) banko-clay and fashion a tea-pot, a plaque, a vase, or a bottle with his thumb and finger, using no wheel at all, and sometimes not even a spatula. He would mould and press and manipulate at will perhaps two pennysworth of clay, and "behold a piece worth the ransom of a great warrior!" Obviously, a good piece of banko cannot be devoid of the personal element, of the absorbed interest and the intelligent personality of the worker, which is so great a charm in any of the arts.

The banko potter once took care that all finger-prints and indentations of the thumb-nail (necessarily made as he fashioned the object, with many pittings and pinchings, from the responsive clay) were not obliterated. There is no doubt as to the charm added by these, yet there were many others, particularly when the objects were tea-pots.

Some were of the thinness of paper, the handles hollow, with exquisite patterns perforated in them, and perfectly form-

ed rings jingling from the top; and then the knobs on the lids turned round and round in their hidden sockets in such a fascinating, unexplainable way. Oh! the little banko tea-pots of fifteen and more years ago! Where are they now? And shall we never see any more like them? They were unglazed, dark brown, or dull red, or stone gray or lilac, or white, or buff, and they came in all sizes that were dainty, and in all forms that were surprising and admirable; furthermore, they were not always expensive.

But they were always beautifully made little things, with never a trace of this sad haste of to-day. The favorite decoration was a flight of storks in white enamel, or falling maple leaves in autumn colors, or many seals imprinted in the biscuit, which meant, "May you live ten thousand years," "A thousand autumns," or some other equally polite wish for a long life.

The ware takes its name from the seal originally stamped upon it, the literal translation of the seal being, "Ancient ten-thousand." On a tea-pot in the writer's collection, a tea-pot with the capacity of just four thimbles, this seal is repeated ten times. The seal of the pottery also appears, and heightens the decorative effect.

The most common product of the potteries until within a few years has been tea-pots, but now (such strict attention does the new, commercial Japan pay to the requirements of the foreign markets) every tea-pot is accompanied by a cream-pitcher and a sugar-bowl. Frequently (too frequently) these are made of very cleverly marbled clay, bedight with cheap gilt, but they have little twisted handles of wistaria stems that are charming; yet, because they were not understood and valued, these new banko pieces show never a thumb-mark or seal, and the decorations are so weak as to be an affront to the taste of the American people.

One of the most charming specimens of Ko-banko ever imported to America was an ancient brown plaque (about twelve inches in diameter), covered on the upper side with a gem-like glaze of jade-green, and decorated with a flight of storks. The American owner refused many desperate offers from Japanese banko-lovers, but finally sold it for \$750. All banko is not Ko-banko ("the honorable antique"), but one would be satisfied could he occasionally find a really good modern bit.

The brown banko, if without potter's marks, is apt to be confused with Bizen, yet Bizen is the hardest ware made in Japan, sometimes being subjected to heat for thirty consecutive days. It is as frail in appearance as banko, nevertheless, and quite as light. The chief distinguishing mark of Bizen is that the decoration is usually incised. Small, undecorated pieces of the dull red Tokonabe ware are frequently sold for banko, but Tokonabe is a heavier ware, and the pieces are always shaped on the wheel.—From *The House Beautiful*, by Olive Perceval.



PERCH, BORDER—M. P. VERNEUIL FROM "ART ET DECORATION"



CHILD'S BREAD AND MILK SET—SABELLA RANDOLPH

JOSS FLOWERS OR CHINESE LILIES

Maud E. Hulbert

THESE flowers, though no doubt narcissus, are called in the West either "Joss Flowers" or "Chinese Lilies," because they are imported by the Chinamen for the altars they erect on their New Year's day. They grow quantities of them in shallow pools filled with stones; the bulb rests on the stones. It is considered very lucky to have the flowers double and very unfortunate if they do not blossom by New Year's day.

The flower is white with yellow in the center. Use Deep Blue Green, Brown Green, Warm Grey, Lemon Yellow and a little Orange Red. The leaves are a blueish green, use Moss Green J., Brown Green, Deep Blue Green, Yellow Green and Shading Green.

Copenhagen Blue would be a good ground for a vase or any tall piece having the leaves coming out of a very dark blue at the bottom, and Copenhagen Grey for the ground at the top.



VASE=EDITH ALMA ROSS



JONQUIL DESIGN

Mary Burnett

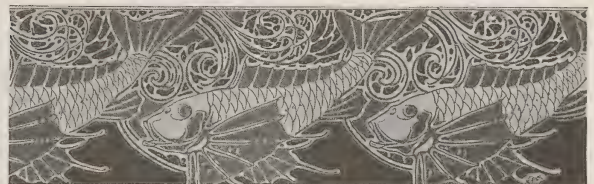
FLOWERS, yellow, pale in high lights, touched with deeper yellow and shaded with green and brown tones. Leaves, green and in high lights quite blue green. Background, rich warm tones of dark brown, tinged with red and green. Rim of gold at the top.



JONQUIL DESIGN

Emma A. Ervin

THE jonquil is very yellow, the cup being quite a bit darker than the outer petals. Shade the deep center with Dark Green. The background is shaded from warm grey into Grey Green and the leaves carry the same colors with touches of Dark Green.



CARP, BORDER—M. SEGUY
FROM "ART ET DECORATION"



RECEPTION HALL NEWCOMB COLLEGE POTTERY

LOUISIANA PURCHASE EXPOSITION CERAMICS

(CONTINUED)

NEWCOMB COLLEGE

The Newcomb Pottery exhibit in the Fine Arts building was of good size and of usual simple shapes and conventional decorations with the familiar greens, greys, yellows and blues with a bright glaze, although a few interesting metallic effects were shown by Joseph Meyers. The decorators represented were the teacher Mary Scherer and of the pupils, Hattie Joor, Marie Hoa Le Blanc, who received a bronze medal, Roberta

Kennon, Ada Lonegan, Leona Nicholson, Amelie Roman, Mazie Ryan and Sabina Wells. To Miss Scherer is due much praise for the high average of design work, and to the potter, Mr. Meyers, for the shapes and glazes.

The medal received by Miss Le Blanc is an unusual recognition of merit, being selected from a number of exhibitors in the same class. It must be understood that these medals awarded by the jury of the Art Palace are of more importance as a recognition of artistic merit, than any medal given in the more commercial exhibits in the Liberal Arts.



NEWCOMB POTTERY



NEWCOMB COLLEGE POTTERY

PERKINS POTTERY

The work of Mrs. Perkins and her daughter Lucy F. Perkins was well represented by their hand-built and modeled pottery with its black or brownish polished surface. We regret not to have an illustration of this interesting work, nor of the work of Caroline Rimmer who exhibited a modeled terra cotta vase with sculptured figures. Miss Perkins received a bronze medal.

MERCER POTTERY

One of the most interesting exhibits in the Crafts department of the Fine Arts building was the work of Mr. Henry C. Mercer, of Doylestown, Pa., to whom a Grand Prize was awarded, one of the few awards that appears to have been given for unusual merit. We much regret that we were unable to obtain photographs of this work which consisted of many cases of set tiles showing various designs, colors and arrangements for floor, wall and fire place uses. The body is of coarse pottery, the glaze and colors of a rather crude majolica effect or of a brick finish but just suited to the quaint mediaeval designs rudely carved and irregular in effect. We can conceive of nothing more interesting for a big open fire place or nothing more comfortable to live with. Mr. Mercer exhibited beside some mugs, sconces and boxes, but the tiles were by far the most worthy of note.

DEDHAM WARE

Hugh Robertson, of Dedham, Mass., showed in the Art Palace a loan collection of about ninety pieces of his flambé vases and Dedham crackled plates in blue and white. For this collection he received a grand prize, which seems to be



SABINA WELLS

MARIE LE BLANC

HENRIETTA BAILEY

NEWCOMB POTTERY

given more for number than artistic merit, for while interesting in a way, the vases are not to be considered as beautiful or works of art, although the Dedham plates have beyond a doubt rare value in color and design.

MERRIMAC POTTERY

The Merrimac pottery was represented by a large number of pieces in mat greens, black, yellow, blue and grey, beside the red terra cottas after Arrehetian models—which were pressed in the ancient moulds in the possession of the Boston Museum. Mr. Nickerson received a silver medal at St. Louis.

POILLION POTTERY

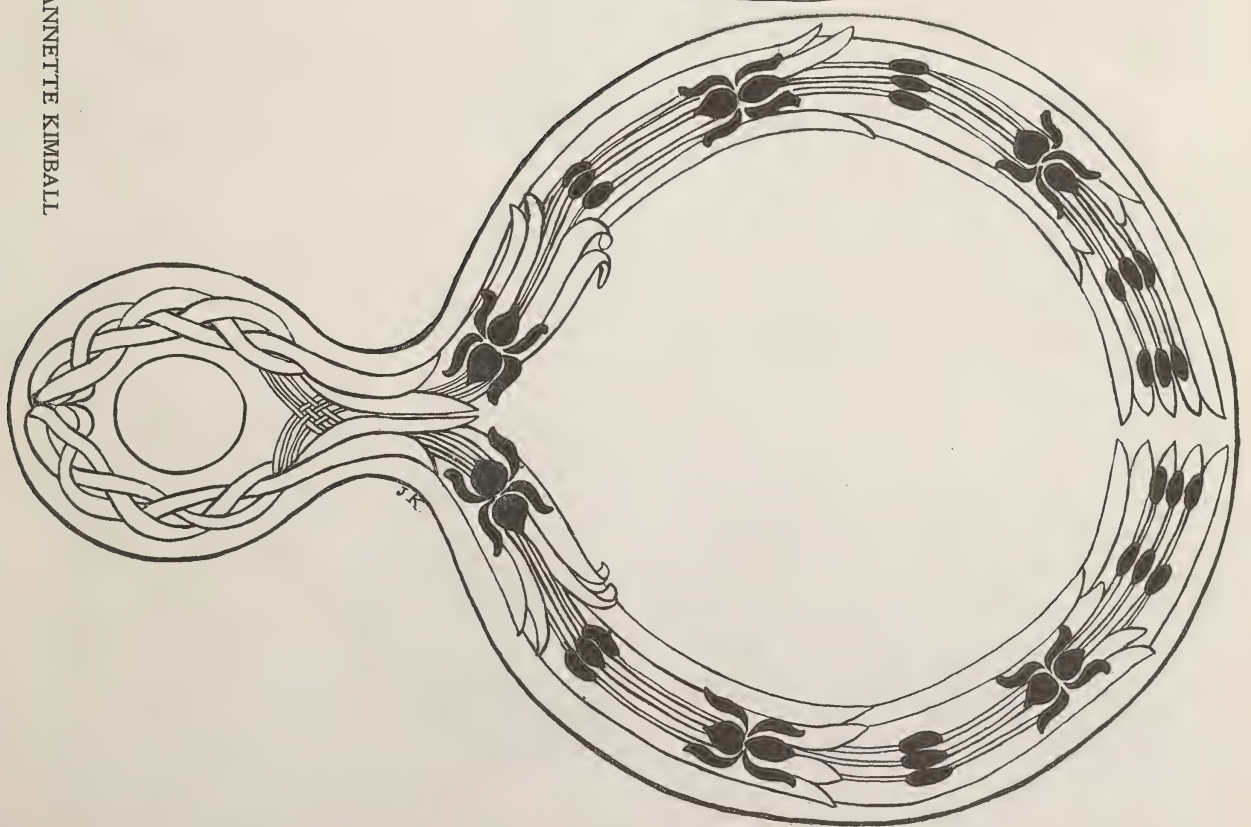
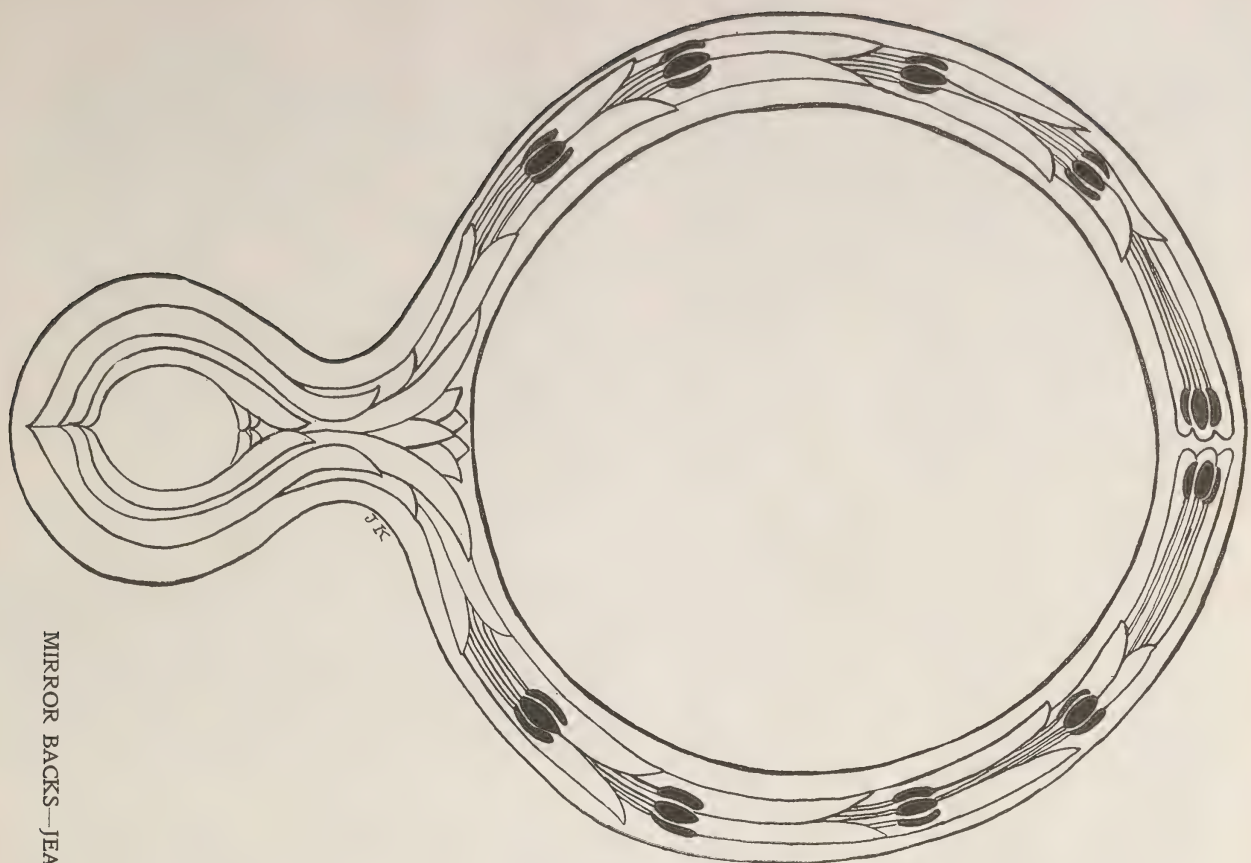
The Poillion Pottery was represented in the Art Palace by a vase by Joseph Insko and a jardiniere by T. H. Pond—odd effects never repeated, freaks of the kiln as they are called.

ALFRED SCHOOL OF CLAY WORKING

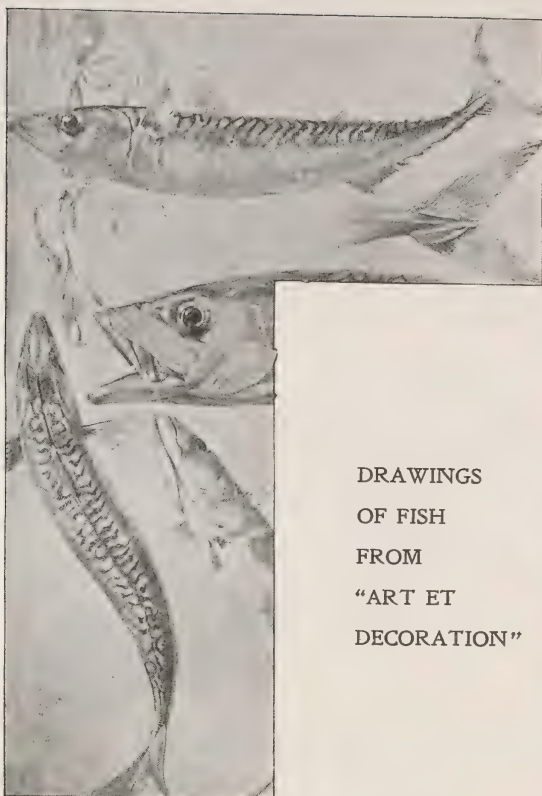
The Alfred School was largely represented, both by the work of Professor Charles Binns and that of several of the pupils of the school—for this exhibit Professor Binns received a silver medal at St. Louis. The glazes were among the most interesting shown, both the simple mat and the craquelé or alligator skin effect being represented. The colors and textures were very interesting and varied and the shapes were simple and good. The ware is a pottery body fired at cone 1. Among the pupils represented in the Fine Arts building were Arthur Baggs, Bessie Burdick, Sabella Randolph and Fred Walrath who received a bronze medal.



ALFRED SCHOOL POTTERY

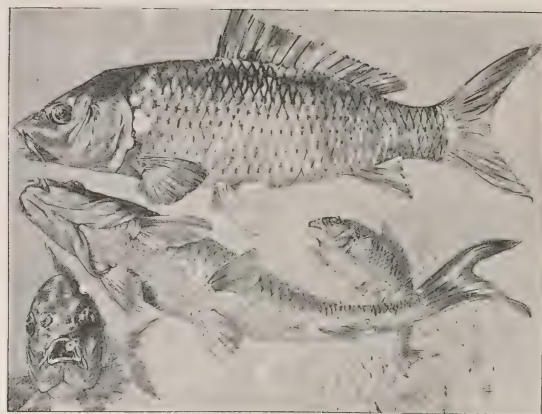


MIRROR BACKS—JEANNETTE KIMBALL

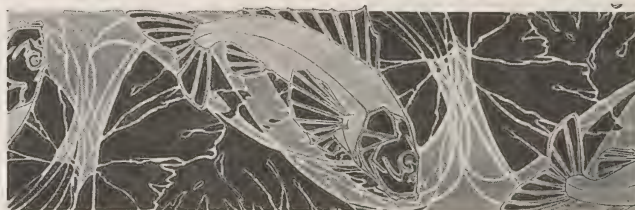


MACKEREL—M. MEHEUT

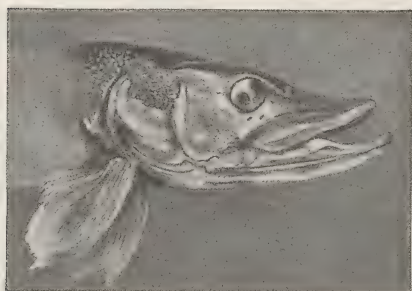
DRAWINGS
OF FISH
FROM
"ART ET
DECORATION"



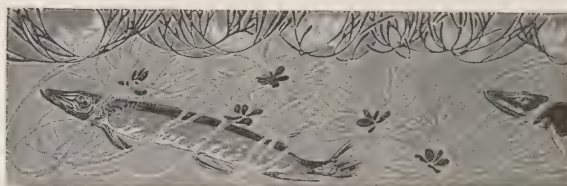
CARP—M. MEHEUT



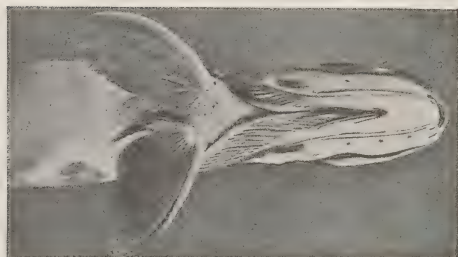
CARP, BORDER—M. SEGUY



PICKEREL—M. BACART



PICKEREL, BORDER—M. BACART

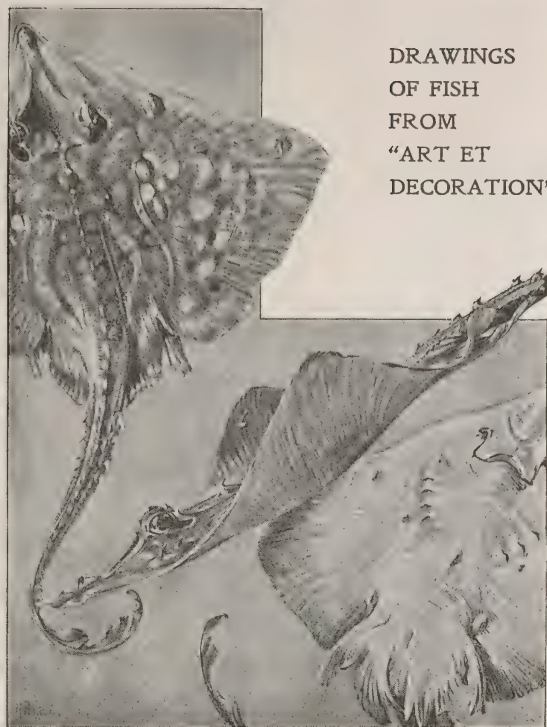


PICKEREL—M. BACART

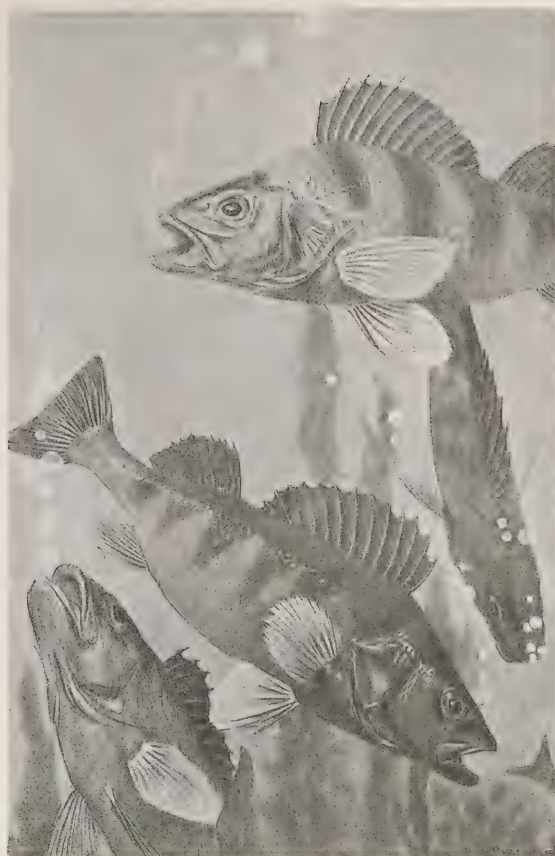


PICKEREL—M. BACART

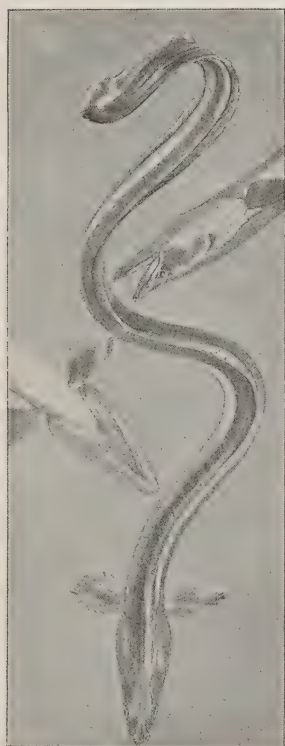
DRAWINGS
OF FISH
FROM
"ART ET
DECORATION"



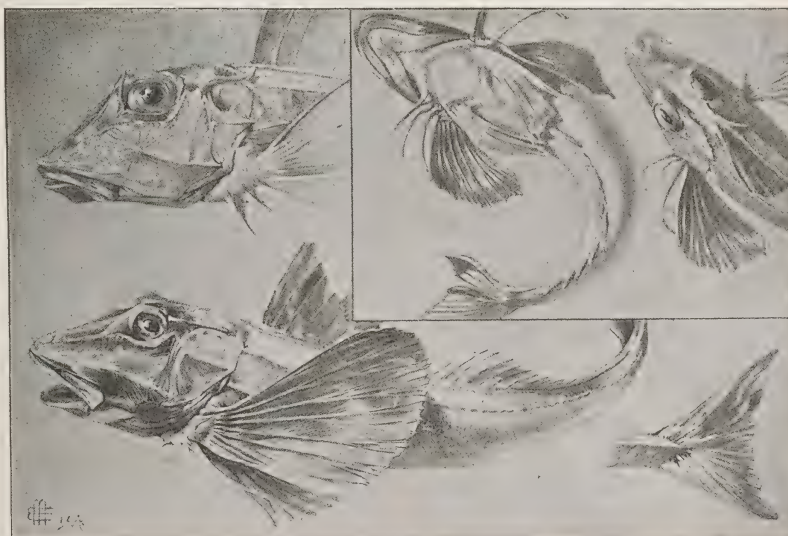
RAYS—M. MEHEUT



PERCH—M. P. VERNEUIL



EELS—M. MEHEUT



GURNETS—M. MEHEUT

HOW TO MAKE COLORED ENAMELS.

THE manufacture of colored enamels for decorating china, porcelain, glass and metal has become quite a flourishing industry in some of the important European glass making countries. Two kinds of enamels are manufactured, the opaque and the transparent, the former being produced from the latter by a simple addition of tin oxide. The oxides in the colored enamels are present in the form of silicates and borates, says the London Pottery Gazette. The melting temperatures of the different colorants vary considerably. It is higher with the real colored glass, which does not melt at less than about 1200 degrees, lower with the enamels for light glazings on porcelains, china or bisque. The melting points of these enamels lie between 850 and 900 degrees. Still lower is the melting temperature of these enamels which are destined for metals and glass painting proper, as they contain usually a very large quantity of lead oxide.

Easily fusible enamels are obtained by melting lead glass together with various metallic oxides, the number of which however is rather limited. Green is produced by copper oxide; manganese oxide alone furnishes violet; mixed with some iron oxide, brown; cobalt oxide is the basis for blue. Antimoniate of potash gives to the copper oxide green a yellow tint, but renders the mass slightly opaque. Black is obtained by mixing red iron oxide and the oxides of cobalt, copper and manganese.

In Salvétat's book we find some recipes for transparent colored enamels which have proved very suitable for ornamenting porcelain bisque. As a base for colored transparent enamels, a glass is used which is composed of 100 parts quartz, 50 borax and 200 red lead.

Ivory colored enamel is obtained by melting together 100 quartz, 50 borax, 200 red lead, 3 antimoniate of potash, 6 hydrated iron oxide and 3 carbonate of zinc.

Yellow enamel: 100 quartz, 50 borax, 20 red lead, 2 chromate of potash.

Violet enamel: 100 quartz, 50 borax, 200 red lead, 12 carbonate of manganese.

Blue enamel: 100 quartz, 50 borax, 200 red lead, 6 cobalt oxide.

Green enamel: 100 quartz, 50 borax, 200 red lead, 10 copper oxide.

Yellow-brown enamel: 100 quartz, 50 borax, 200 red lead, 40 red iron oxide.

Black enamel: 100 quartz, 50 borax, 200 red lead, 1 cobalt oxide, 1 copper oxide, 3 manganese oxide, 2 red iron oxide.

In order to convert the transparent enamels into opaque enamels, there is, according to Steele, a suitable quantity of tin oxide added to the flux. As it is known that the enamels receive a certain degree of opaqueness if the tin contents are one-tenth of the whole weight, all that is needed to render an enamel opaque is to add the corresponding weight of tin oxide. This is best done by mixing the tin oxide with the litharge, so that for producing opaque enamel, 106 parts of this mixture is put into the batch, instead of 100 parts litharge alone, as is done in the case of transparent enamel.

The transparent enamels are used in the painting of glass to put upon white glass at certain places a transparent colored covering. Such colored coverings, however, can also be produced by another method, namely by impregnating. This is done by covering the glass surface with a mass which without forming a molten colored glass layer, colors the glass during burning-in, while the residuum serving as the vehicle, consisting of ferruginous clay or iron oxide, is removed at the end of the process. If both sides of a glass sheet are treated in this manner

it has the appearance as if it were dyed in the batch. This method is chiefly used in the production of yellow by means of silver. This action of the metal on glass was discovered in the fourteenth century, and if today, instead of the metal, chloride of silver or silver oxide be used, it is done only because those substances can better be obtained in finest powder form than metallic silver, and are reduced to metal by the high temperature in the muffle. Silver oxide, however, is to be preferred, as, owing to its easier reductibility, a lower temperature can be employed, and colors lower in metal can be produced, which means a saving in silver.

The chloride of oxide of silver is not applied in its pure condition, but in combination with an indifferent material which, at the high temperature in the muffle, neither shrinks nor sinters, nor adheres to the glass. Such a substance is clay, red chalk, or iron oxide, which, before use, have to be exposed for some length of time to a higher temperature. Assurance is hereby obtained that during the burn-in operation there is no shrinkage or cracking of the layer by which certain places of the glass would be exposed, and hence escape the coloring action of the metal. With one of the indifferent materials chloride of silver is mixed in the proportion of 10 to 15, oxide of silver in that of 1 to 15 or 20. Water is added to this mixture until the proper consistency is reached, when it is applied to the glass in a moderately thin layer. After having dried at an ordinary temperature, the glass is put into the muffle, where it remains until the color is perfectly developed. The residuary mass on the glass is afterwards removed with brush and water.

According to the content of the silver in the mass the glass is more or less strongly colored, but even when producing the deepest, richest yellow, there is generally 95 per cent of silver left, which can again be utilized after having been regenerated into oxide, by means of nitric acid and caustic potash. The coloring given to glass by this method is purely superficial, and the thickness of the yellow layer can hardly be measured, but the process is easily accomplished and the result lasting.



DESIGN OF FISH FROM "ART ET DECORATION"
CARP—M. SEGUY



APRIL, 1905
SUPPLEMENT TO
KERAMIC STUDIO

CHRYSANTHEMUMS—F. B. AULICH

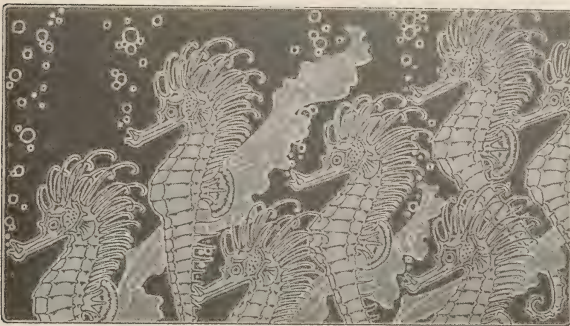
COPYRIGHT, 1905
KERAMIC STUDIO PUB. CO.
SYRACUSE, N. Y.



PERCH—M. P. VERNEUIL



MACKEREL—M. LASSERRE



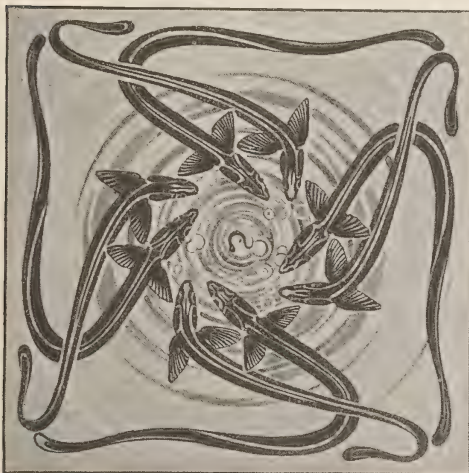
SEA HORSE—M. P. VERNEUIL



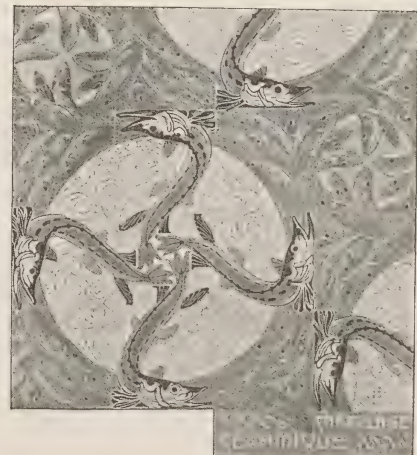
PERCH—M. P. VERNEUIL



EEL PLATE—M. DUFRENE

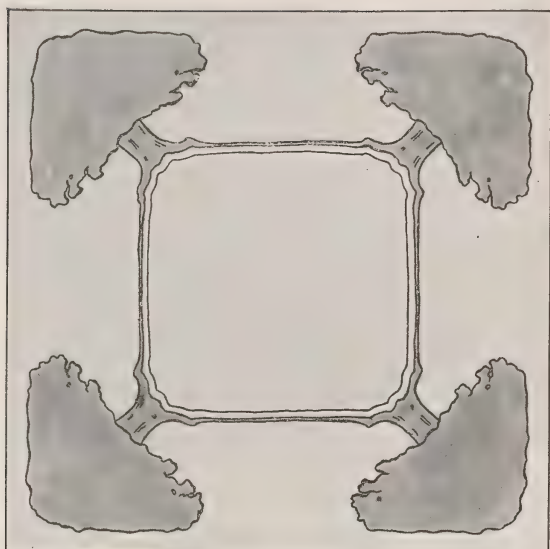


EEL TILE—M. DUFRENE



MACKEREL—M. MEHEUT

FISH DESIGNS FROM "ART ET DECORATION"



TEA TILE

Alice Witte Sloan

To be executed in two shades of grey green with dark outlines.



TILE DESIGN—PEACOCK FEATHER MOTIF

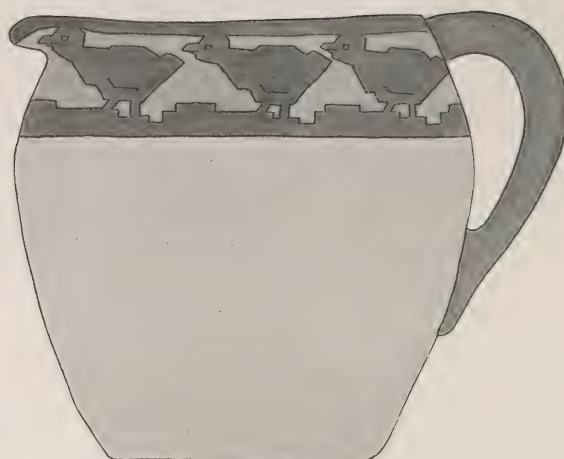
Margaret Overbeck

This tile design is to be executed in grey green on a dull buff ground with washes of dull purple, green, blue and yellow in the eyes of the peacock feathers.



NEW YORK EXHIBITION

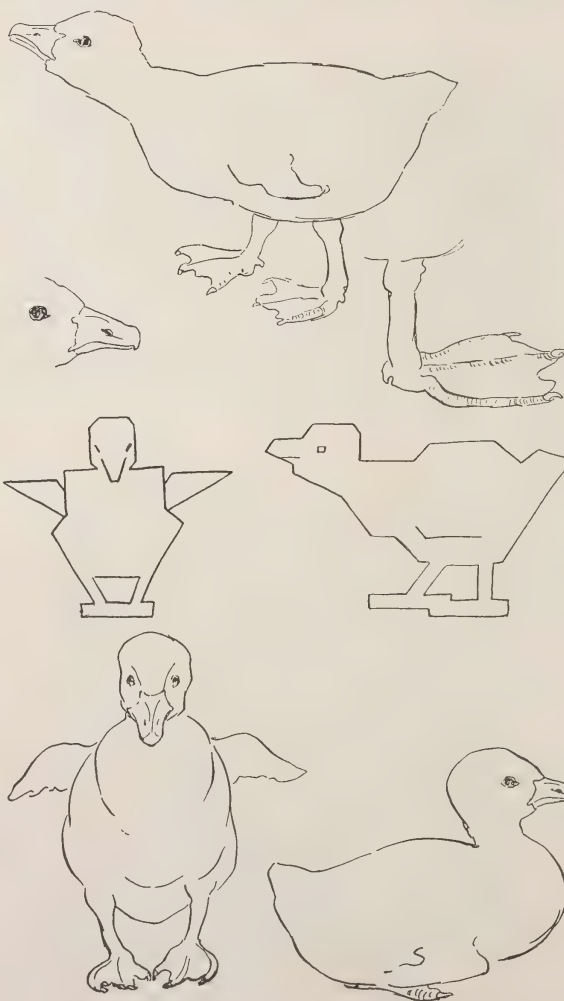
Do not forget that the annual exhibition of the New York Society of Ceramic Arts will be held at the National Arts Club, 39 West 34th Street, New York, from April 19th to May 8th. There will an evening reception on April 24th.



CHILD'S PITCHER

Mary Overbeck

To be executed in gold on a buff ground, outlines in brown and cream tint on pitcher.



GOSLINS—MARY OVERBECK

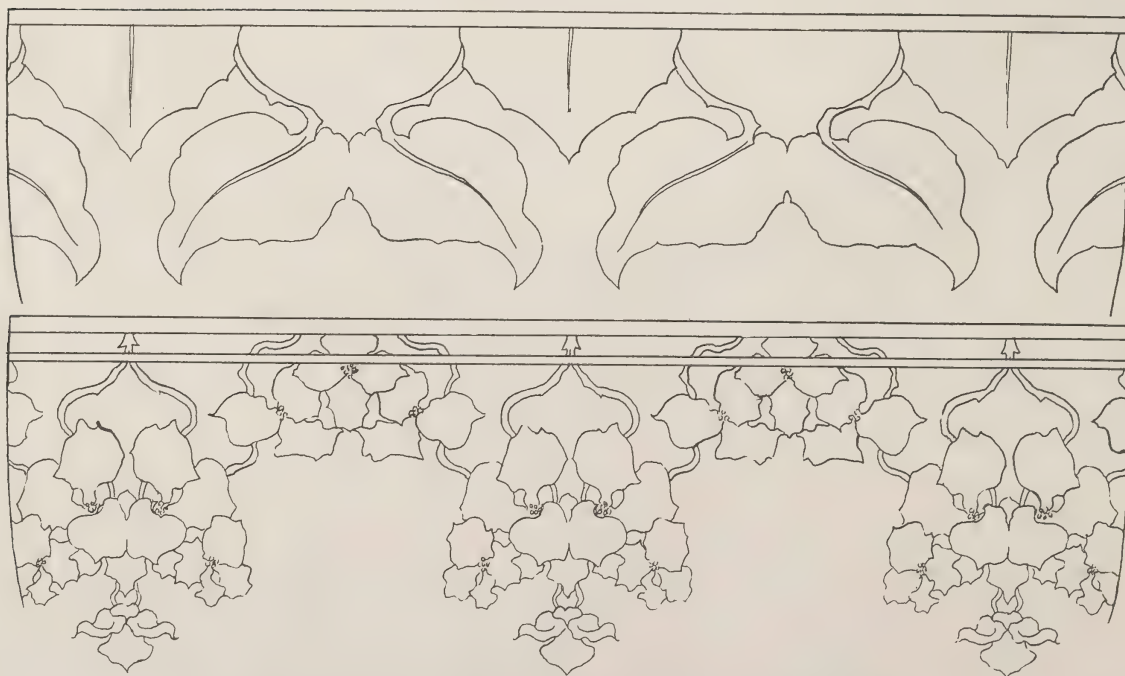


BERRY PLATE—OLIVE SHERMAN



CUP AND SAUCER—C. BABCOCK

To be executed in canary, yellow brown and gold.



HYDRANGEA BORDERS FOR BOWLS—ALICE WITTE SLOAN



BLACKBERRIES—I. M. FERRIS

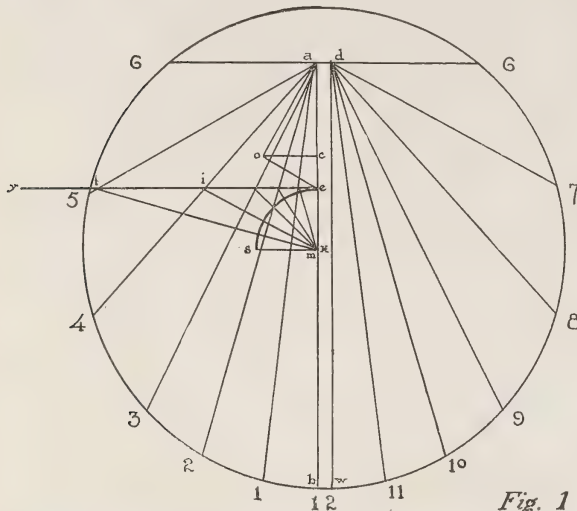
FOR blackberries use Sèvres Blue, Royal Purple and Black. Make one cluster more prominent than the rest. Paint the main cluster of leaves in Albert Yellow, Yellow Brown, Moss Green and Brown Green; the other leaves may be done in blueish grey tones. Make blossoms shadowy with Grey for white roses or Grey Green with a little Yellow in centers. Background lightest tone Albert Yellow near center of plate, the rest of the light part Lavender glaze. Darker places Sèvres Blue, Purple Black with Royal Purple, Royal Green and Dark Green.

THE CRAFTS

WOOD CARVING AND PYROGRAPHY. LEATHER AND METAL. BASKETRY, ETC.

Under the management of Miss Emily Peacock, Karol Shop, 22 East 16th St., New York. All inquiries in regard to the various Crafts are to be sent to the above address, but will be answered in the magazine under this head.

All questions must be received before the 10th day of month preceding issue and will be answered under "Answers to Inquiries" only. Please do not send stamped envelope for reply. The editors will answer questions only in these columns.



The lines "a b" and "d w" on Fig. 1 must point north and south when the Dial is set, "d" and "w" being at the north and "a" and "b" at the south of the gnomon or style.

THE MAKING OF A SUN DIAL

Joseph T. Higgins

WITH the renewed interest in antique furniture and formal gardens has come, to many people, the desire to possess one of those strange time-pieces so mysterious to us as children—the quaint old sun dial. To a girl it was only a "funny old thing," but a boy's curiosity always got the better of him and required an answer to the question, "what makes it go?" Fortunate was he who learned, for it revealed new delights in the knowledge of astronomy, which presented so many questions to ask. But most fathers could do no more than explain that the moving shadow pointed out the passing time, with the result that nowadays there are few indeed who know where to buy an accurate dial, to say nothing about how to make one. Many that are sold are made for a given point, though used several degrees of latitude north or south of it, and this is the reason purchasers are surprised that their dials do not agree with the tables given in the almanac.

To secure a useful instrument it is essential to know the latitude of the place where it is to set, and this found one may construct his own, an occupation interesting alike to scientist or craftsman. To the latter in particular it affords a new way to try his workmanship and his knowledge of applied design, for the decoration of a dial may be carried far and a well proportioned pedestal or other support adds much to its charm.

By referring to the figure numbered 1 the method of laying out the hour-lines may be easily followed. There are many varieties which may be fashioned, including the north-, south-, east- and west-vertical and those which recline, incline and decline, but the simplest and most used is the horizontal which is placed with its face parallel to the surface of the earth, and this the figure represents.

Draw "a b", and at right angles to it "6,6". At any convenient point in "a b", and at right angles to it draw

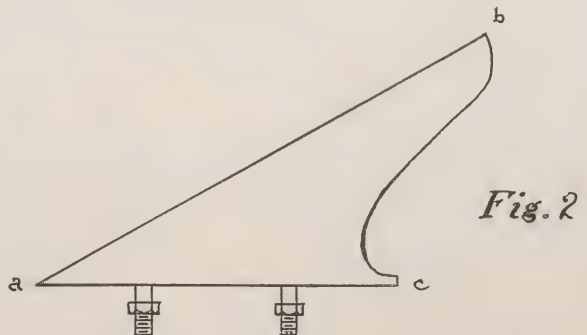
"c o". Make "c a o" equal to the latitude of the place and construct the angle "c o e" equal to the same. Make "e m" equal to "o e" and with "m" as a centre, with the radius "e m", describe the quadrant "e s" and divide it into six equal parts. Draw "e y" parallel to "6,6" and from "m" through the five points in the quadrant draw "m t", "m i", etc. Then from "a" draw "a 5", "a 4", etc., passing through "t", "i", etc. The hour-lines for one half the dial are now complete and to draw the other half make "a d" and "b w" equal to the thickness of the stile and draw "d w" parallel to "a b" and repeat the process already described. It may be a trifle simpler, however, to draw a circle of any radius from any convenient centre, as "x". Space off on this the divisions "6 7", "7 8", etc., exactly equal to those on the opposite half. To divide the hours into quarters, subdivide each of the divisions on the arc "e s" into four equal parts and continue as in constructing the hour lines.

All that now remains to be done is to lay out the gnomon, which is usually a piece of metal similar to figure 2, the angle "b a c" being equal to the latitude of the place.

As accuracy is a necessity and paper shrinks and stretches according to the amount of moisture in the atmosphere, this drawing should be at once traced with India ink on a piece of cloth procured for the purpose.

If the dial is to be of metal, as is usual, order a piece of half-hard brass of the size desired rather than try to have it cast. A casting may be a little cheaper but a good deal of trouble is sure to be found with cold-shuts and other flaws and it will not present so even a texture to engrave.

A plain, old-fashioned sun dial will always be good to look upon because of the regularity of its divisions and the contrast between the straight and curved lines, but it is nevertheless susceptible to decorations, which if not too elaborate will add considerably to its beauty. It is in itself so stiff and formal that conventional designs are the most appropriate to use, and many a plate graced only with the Tudor Rose, or a stiff rosette, possesses far more charm than the over-ornate things that are frequently imported. But the mottoes and decorations on these curious time-pieces do, and should, proclaim their owner's tastes, so select ornamentation and a motto, each according to his own fancy. Only two points are essential:—do not allow anything to interfere with the



The point "a" of Fig. 2 should coincide with the line "6,6" at "a d" its sides being on the lines "a b" and "d w"

hour-lines or a clear, distinct shadow from the gnomon; and seek to have the numbers of the hours and the subdivisions of the spaces the most prominent points on the plate.

These things settled, transfer the points on the tracing to the surface of the brass with a well sharpened scratch awl and describe the various circles with a pair of steel dividers. In engraving be careful to get clean, firm lines throughout,



Fig. 3.

and unless well skilled do not attempt any shading. Let each line be deep enough to make a good shadow and so speak for what it represents without affectation. It is better not to fill the lines but let each be distinguished by its shadow so that when darkened by the weather the color of the metal will not conflict with that of the filling.

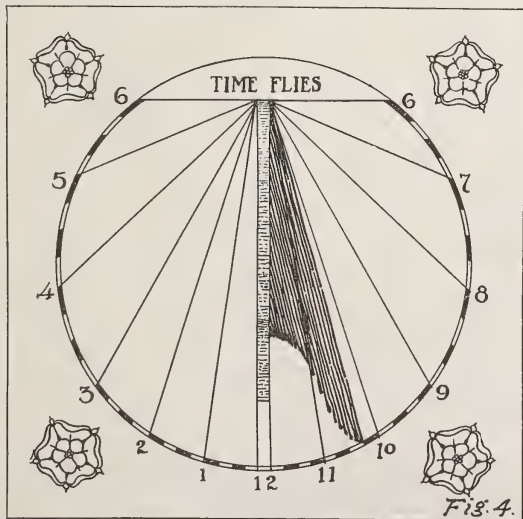


Fig. 4.

All that remains is to shape the gnomon and fix it in place. The ordinary form is similar to that in the figure but sometimes they have the monogram of the owner left solid and the rest of the triangle cut out and sometimes they are filled with scrolls, while others still are engraved on the sides. But plain or fanciful, it is all one if the edges are true and sharp, and it is fixed securely to the dial-plate.

However simple it may be every dial should be inscribed

with the latitude and at least the year in which it was made.

Anyone who is unfamiliar with this form of time-keeper has only to glance through "Sun Dials and Roses of Yesterday", written by Mrs. Alice Morse Earle, to become thoroughly imbued with their spirit and a desire to know more of them. This accomplished, recourse may be had to several old books, occasionally to be found in the best libraries, on the once valued art of dialling, which were written by Leyborn, Leadbetter, Fergusson and others as early as the seventeenth century. If these are not available the modern Book of Sun Dials, by Mrs. Alfred Gatty, will be of great interest, and the Encyclopedia Britannica contains a good article on the mathematical part of the work.

Dials have been made of pottery but they are unsatisfactory because great difficulty is likely to be found in retaining any degree of accuracy, and this is the prime requisite of all dials. In fact, if one has a knowledge of spherical trigonometry better results may be obtained in this respect than by following the method here described.

It may be that some will think from this article that the making of a sun dial permits very little individuality on the part of the craftsman, but this is not so, and he who makes a single specimen of this quaint instrument will say with Shakspeare

"Methinks it were a happy life . . .

To carve out dials quaintly point by point."

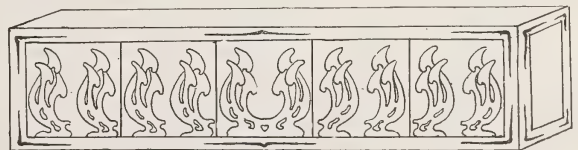


TILED BOX FOR PLANTS

Emily F. Peacock

TREAT the tiles in three or four tones of blue, they will need three fires at least. When the wood frame is made, outline the design with a carving tool and inlay a little blue color in it. The zinc lining should fit well, and the joints be well soldered, so that there will not be any leakage.

MATERIALS—Twelve six inch tiles, five for each side and one for each end; a frame of silver birch and a zinc lining.



END VIEW

COMPLETED TILED BOX
FOR PLANTS.

THE ART OF ENAMELING ON METAL.

Laurin H. Martin

(CONTINUED)

AFTER the enamel has been laid into the design engraved on the silver, great care having been taken to put it in every little point of the design, it is placed on an iron plate (see Fig. 5 in March issue) and very slowly dried, allowing the water that was used in applying the enamel to dry fully out before firing it in the muffle furnace.

It is well to cover the iron plate with a composition of tripoli, sand and plaster of Paris. Enamel will not stick to this. The proportion of this composition is four of tripoli to one of plaster and one of sand. After the enamel is dry and placed on the iron plate it is placed in the muffle furnace. (The Buffalo Dental Mfg. Co. make a very good muffle gas furnace for enameling, see Fig. 6).

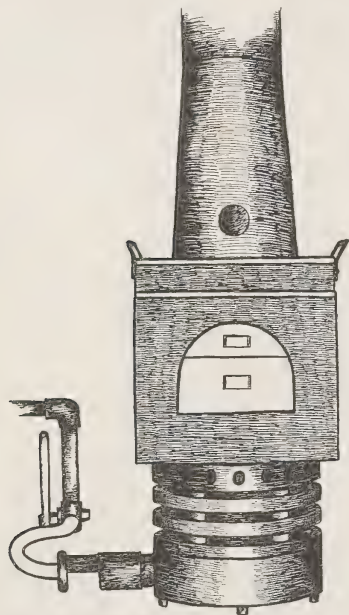


FIG. 6—FURNACE FOR ENAMELING.

The furnace must be quite hot before the enamel is put in. It takes about fifteen minutes from the time the furnace is lighted to get hot enough to fire the enamel. Never go by time in firing enamel for the reason that a large thing takes longer than a small one and some enamels take longer to fire than others. A small dish will take about four minutes. If you are firing a small silver pin and the furnace is quite hot it will fire in a minute. Constantly look at the enamel and see how it is getting on. It will at first look rough, but it will get smoother and smoother until it is done. If you are ever uncertain take the enamel out and look at it, if it is not quite smooth put it back again. I have seen so many failures from overfiring enamel.

If you overfire enamel on silver the silver will melt. Do not hasten the cooling of the enamel after you have taken it out of the furnace, if you do it is apt to crack.

Great care must be taken in every step of enameling. If metal is not well rolled there will be little air cells in it and if there are the enamel will fly. Do not put enamel on too thickly for if you do it is also apt to crack. We have now fired our enamel for the first time and if you desire to add other

colors, as you most always do, place them on with water as before and dry and refire in the same way. Refire a third or fourth time if necessary.



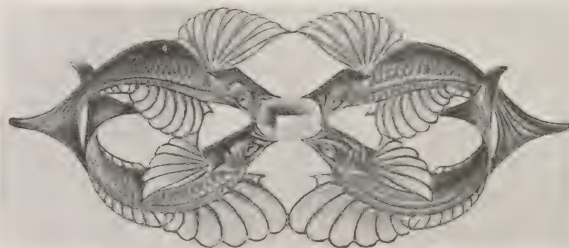
BELT PIN IN CHAMPLEVE ENAMEL.

If you get any enamel on the division lines of metal as one is very apt to do, in fact almost sure to do, you can grind it off by using an Indian stone and plenty of water. After that you can use a fine sandpaper and that will take out the scratches made by the stone. Do not be afraid of hurting the enamel in doing all this. It will scratch the enamel and disfigure it until it is fired again.

After you have stoned and sandpapered you must wash the enamel very thoroughly and it is a good idea to paint it over with a little hydrofluoric acid. Take great care not to get any of this acid on your hands for it is very painful if you do. Now after the stoning and cleaning you must refire so as to polish the enamel. If you get a color scheme that you do not like you can always etch it out with hydrofluoric acid. The best way to use it is to paint it on and let it stand ten minutes or so and then wash it off with water. By repeating this process you can soon eat all of the enamel away. This acid does not affect the metal in any way.

After firing the enamel for the last time, you still have to clean and put the final finish on the metal. This is done by boiling it in sulphuric acid one-twelfth strength until the silver is white. The silver is then polished. The best way to polish silver or copper or gold is to take a hand buff which is a narrow stick with a piece of felt or leather on it. Rub this leather on a brick of wax tripoli and then rub on the metal. This tripoli will take out scratches on the metal and at the same time does not hurt the enamel. Tripoli makes the metal perfectly smooth but if you desire more of a polish use rouge in just the same way.

I have just described the champlevé process of enamel and will next take the cloisonné process.



BROOCH, PERCH MOTIF—M. P. VERNEUIL FROM "ART ET DÉCORATION"



PAPER CUTTER AND PEN, EEL MOTIF—M. DUFRENE. FROM "ART ET DECORATION"

ANSWERS TO CORRESPONDENTS.

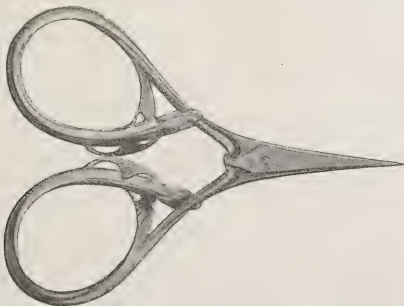
Carmine and Apple Green make a good shading color for white flowers—for greens use Royal and Moss Greens, Brown Green, Dark Green 7 and Banding Blue.

B. M. F.—If you wish Aufsetzweis to stay raised you should not put flux with it, flux is only used for flat enamel effects.

A. L.—Your request for colors for bouillon cups is rather indefinite, that depends upon the design, and the choice of designs lies with you. KERAMIC STUDIO supplies many cup and saucer designs which should be appropriate, but it is impossible to select for a subscriber not knowing her taste. We should say, select something simple to be carried out in gold with black or red outlines or a design in one or two tones of blue or green, or whatever color you prefer.

A. R.—For black outlining in conventional work, use the powder black, German Black or any black sold for this purpose by our advertisers who are all reliable; mix it with a thin syrup made of sugar and water, if you wish to do your outlining before putting in the lustre, otherwise use just enough fat oil to make it stick well together and thin with spirits of turpentine. Lustre which has thickened up, can be thinned with oil of lavender. Lustre brushes should be washed first in turpentine and then in alcohol and dried by brushing lightly on a cloth before using again, this takes but a minute. Liquid gold comes out of the fire purplish when put on too thin or when turpentine has been used with it. Turpentine should never be used with lustre.

Mrs. J. H. S.—In decorating a piece of china with lustre and raised gold, it is necessary to put on first the lustre and dry it thoroughly, then the raised paste can be put on but it is better if they do not touch as the medium in the paste is liable to run a little into the lustre and cause spots, if the lustre gets into the raised paste it may discolor the gold even if fired first. Roman gold may safely be used either over or under lustre, always firing one first before putting on the other. It should not be necessary to burnish gold which has lustre over it, but if this is done it should be done carefully as the lustre may burnish off somewhat, the only remedy is to go over all the gold with lustre and refire. For a dusted black ground several powder blacks are sold by our dealers, write to them—a fine black effect is also gotten by dusting with pompadour red and then with banding blue, this of course takes two fires.



M. DUFRENE—FROM "ART ET DECORATION"

Mrs. B.—You will find a treatment of Poppies in mineral colors by Mrs. Sara Wood-Safford in the January 1904. KERAMIC STUDIO. For Morning Glories use Royal Purple, Violet 1 and 2, Banding Blue, Ruby Purple, Carmine or Rose.

D.—Your vase with the five figure panels of the Senses would not look well with clouding coming up from the vase, the figure panels should be distinctly separated. We should suggest tinting in pale blue if that is the color you prefer, then cleaning out a rectangular or oval panel for each figure and finishing the panel with an outline or simple design in flat gold if raised gold is too difficult for you. An article on raised paste was given in January 1905, K. S. and one on enamel will soon be given. We do not understand why the dots chipped off in your plate while the modelled roses did not, if your paste and everything was exactly the same—chipping is usually due

to too much fat oil,—possibly your paste got a little fat standing if the dots were put on last.

M. P.—Write to our advertisers for game designs to be rented. You will find names of teachers who rent designs on our Teachers' page

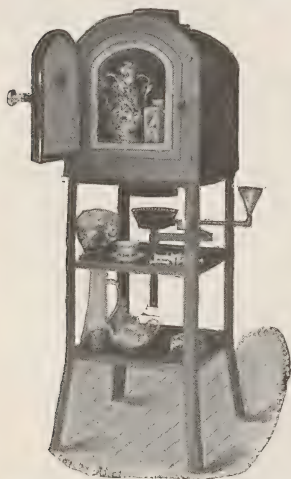


SEAL BELTS WITH BUCKLES OF BONE

These belts made in Greenland were most unusual and beautiful in color. The foundation was a soft red in one belt and white in the other. Leather, the material for the design, was procured from the intestines of the seal. These are washed, dried and colored, then cut up into infinitesimal pieces and sewed on by hand. The buckles were carved from bone in the most ingenious way, and teeth threaded on a bit of leather were used to fasten.



The "IDEAL" CHINA KILN



THE "SPHINX" Improved China Palette Box

With Removable Palette
Patented Nov. 29, 1904

DIRECTIONS—For the purpose of cleaning or replacing the Palette, in case of breakage, slide back the sleeve connecting and locking the two ends of the steel spring wire, that holds the Palette in its place. By lifting up the two ends and pulling the wire out of its groove, from any one side, the Palette is easily removed and afterwards placed back in its former position in the same manner.

Made of Heavy Japanned Tin,
in two sizes.

Size 9x13, price each.....\$1.25
Size 6x9, price each......90

For further particulars inquire
at

F. WEBER & CO.

Manufacturers, Importers, Dealers
Artists' and China Painters' Materials,

709 Locust St., 227 Park Ave.
St. Louis. Baltimore.
1125 Chestnut St.,
PHILADELPHIA.

THIS WIDELY KNOWN MARK

**J. P.
L**

: : : STANDS FOR

POUYAT CHINA

THE OLDEST AND BEST.

WRITE TO US FOR NEW CATALOGUE JUST
OUT, AND ORDER FROM YOUR DEALER. . .

POUYAT 37-59 MURRAY ST. NEW YORK

Write for Booklet, The Baron's Cook Book.

HAVE YOU SEEN

our "Inducement to Old Subscribers to Work for Us?"
Send Postal for details.

KERAMIC STUDIO PUB. CO., Syracuse, N. Y.

FREE-- A Beautiful Flower Study with every
50 cent order for

China Painting Materials

Discounts to Teachers.
Send for Art Catalogue.

ERKER BROS. OPTICAL CO.,

608 Olive Street,

ST. LOUIS.

Write for Catalogue No. 42 K.



SENT FREE

Send your name to-day for our
new catalogue of : : : : :

White China

No. 42K contains over 1,000
illustrations of White China for
Decorating selected from our
immense stock—the largest in
America—embracing all the
newest and best in china, which
we import direct. : : : : :

Our prices are reasonable.
Safe Delivery Guaranteed.

**We Make China Painting Supplies and
Artists' Materials of all kinds.**

Would you also like either of these catalogs? 40K—Artists Ma-
terials; 55K—Pyrography Goods; Send 2c postage.

Agents for Revelation China Kilns.

THAYER & CHANDLER,

160-164 JACKSON BLVD.,

CHICAGO.

White China for Decorating.

D. & Co.

FRANCE.

IF YOU WANT QUALITY,
The Best SHAPES,
RESULTS in Firing.

USE THIS MAKE OF CHINA.

New Catalogue just issued, will be sent on application. Goods must be ordered
through nearest local dealer.

SOLE AGENTS FOR THE UNITED STATES.

Endemann & Churchill,

50 Murray St.,

New York.

HOUSE-BUILDING AND HOME-MAKING

A FREE BOOKLET, telling you how we can help you to

Sent FREE to
Your address

Build and Furnish Your Home
in a Simple and Practical Way

That will be satisfying
and yet not expensive.

We would be glad to tell you how
we came to make

The Craftsman Furniture; How we get
the beautiful finish that makes the wood
itself so interesting, and how you can get
the same effects in woodwork and floors
of your house,

Why our Leathers and Fabrics have
the beautiful textures and colors that are
so much admired.

We would also like you to
know more about

Our Hand-wrought Metal Work, which
adds so much of human interest to the
general scheme.

Our Needle-Work, Homecraft, and
many other helpful suggestions will inter-
est you.

SEND YOUR ADDRESS TO

Gustav Stickley

The Craftsman

Syracuse, N. Y.

HISPANO-MORESQUE WARE OF THE XV CENTURY

*A Contribution to its History and Chronology Based
Upon Armorial Specimens*

By A. VAN DE PUT

Beautifully Illustrated with thirty-four plates, several being in
colour, with numerous smaller illustrations in the text.

8vo. CLOTH, GILT \$4.00 net

While every other department of pottery has received due attention from ceramic
writers, the literature of the highly decorative Hispano-Moresque Ware has remained
scanty in the extreme.

Hispano-Moresque Ware differs from other ceramic products in that it has re-
corded neither marks or any personal traces of individual potters. Yet owing to the
peculiar nature of the information yielded by Heraldry, when properly interrogated,
it has been possible to present a series of dated specimens illustrating the evolution of
the styles during the Fifteenth Century.

Besides the thirty-four plates and other illustrations, there is included a map of
the Valencian Potteries, and a Genealogical Table showing the princes for whom the
pottery described was made and their relationship.

ORDER BLANK

JOHN LANE, Publisher
67 Fifth Avenue, New York

Kindly send me.....copies **HISPANO-MORESQUE WARE**

OF THE XV CENTURY, price \$4.00 net for which I enclose.....

Name.....

Address.....

BRUSH & PENCIL

an International Illustrated Magazine of
Fine and Applied Art. Published in
America for American People

BRUSH AND PENCIL during the year
1905 will maintain its high standard
as the chief exponent of American
Art and art interests. It will, moreover,
include the best artistic work of the Old
World..... The Magazine is in its fif-
teenth volume. It is now recognized as
THE art publication of America. Its
growth and development are sufficient
evidence of public opinion as to its value
in the past, and it is the publishers' aim
to make it in the future indispensable to
all who wish to keep abreast of the times
in art matters.

Annual Subscription, \$2.50

Single Copies, 25 cents

THE BRUSH AND PENCIL PUB. CO.

111 East 23rd Street, New York
215 Wabash Avenue, Chicago

Monthly Design Competition

June Competition Closes April 15th, 1905

The Problem for this competition will be a conventionalized border for a mushroom plate. Illustrations of mushrooms will be found in the February number of *KERAMIC STUDIO*.

First Prize, \$5.00

Second Prize, \$4.00.

July Competition Closes May 15th, 1905

The problem of the July competition, closing May 15th, will be a study of some Spring flower. In these studies, careful note must be made of the balance of masses, spacing, harmony of beauty, arrangement of dark and light, as explained by Mr. Hugo Froehlich in his articles on design in *KERAMIC STUDIO*. These studies should be made in India ink, wash drawing, accompanied by details in pen and ink, and treatments for mineral or watercolors or both.

First Prize, \$8.00.

Second Prize, \$5.00.

August Competition Closes June 15th, 1905

The Problem for the August competition, closing June 15th, will be a conventionalized border in black and white for a fish platter, one section at least to be given in color and the design to be accompanied by a treatment in mineral colors. The platter to be 20 inches in length. Studies of fish with conventionalizations by French artists will be found in April issue.

First Prize, \$10.00.

Second Prize, \$8.00.

Third Prize, \$5.00.

Open to Everyone

No one is excluded—Non-subscribers, foreigners, former prize-winners, are eligible. Mark with fictitious name or sign, same to be on envelope enclosing name and address of competitor.

A color scheme should be sent with each design, at least a section of the design in color. Between two designs of same merit, the prize will be awarded to the one accompanied by the best color scheme.

Designs must not be traceable to any existing pattern. All work should be mailed flat. Designs receiving mention will be considered for purchase. Send return postage for all designs submitted.

Each design must be made separately and not overlapping another. Any number of designs can be submitted by one person.

Designs from foreign countries should be sent by mail, not by express or Parcels Post.

The Jury reserves the right to withdraw any prize for which there is no sufficiently worthy design.

KERAMIC STUDIO PUBLISHING CO.,

SYRACUSE, N. Y.





SMITHSONIAN INSTITUTION LIBRARIES



3 9088 01584 9227